ABSTRACT
OF AN

Introductory Lecture

Delivered by

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(*Concluded from p. 816.*)

IF then, gentlemen, medicine as a science and as a practical art is advancing with such rapid strides at the present time, are you prepared to master it, and to take your part in it and to aid its progress? Has your preliminary training been such that you can now study advantageously the nature and properties of remedies here, and then go with me to the hospital and watch their effects in the treatment of disease? Are you prepared to investigate carefully the phenomena of disease, to learn how to recognise its presence, and to trace its cause and relations; and to bring to your assistance all the aids which modern science has afforded us? The study of morbid phenomena and how to deal with them is the work upon which you are now embarking, and it will require all your energies and time and perseverance. Perhaps you will ask, What scientific culture ought we to possess for this? I will briefly endeavour to discuss the point. You are all well acquainted with the schedules of subjects which, in their prescribed order, are to be studied before you present yourselves for your various examinations; and, in my opinion, wisely and well have these subjects and their order of study been suggested, and I would strongly advise you to adhere to what has been drawn up for your guidance. But what I would warn you against is, being led away by enthusiasm for any special branch of science to devote an undue amount of your time to that branch, neglecting your other studies, and so failing to acquire a competent and sound knowledge of all the subjects with which it is necessary that you should be acquainted. The dazzling experiments in chemistry, or the wonderful revelations of physiology, cannot fail to produce their effect on any sensitive mind, and to entrance it; and not a few who have commenced the study of one or other of these sciences preparatory to the study of medicine have found so much to charm and interest them, they have been so willing to linger over their experiments and investigations, that medicine has been forsaken; they have, perhaps, become enthusiastic and illustrious workers in these departments, but they have never realised that an equal, I think a greater, interest is to be found in those studies which were beyond, and for which their own were merely the foundations. But independently of the attractiveness which practical chemistry and practical physiology have for the mind, there is another danger to which students are at the present day particularly exposed; and that is, the overweening importance which is attached to their own subjects by some teachers of these special branches. Now you *must* have a good acquaintance with human anatomy, as far as observation will give it you, and a sound knowledge of chemistry and physiology, gained by practical work. Mark what I say, a "sound knowledge"; not an intimate acquaintance with these subjects—that would require more time than is at your disposal even for fitting yourselves for the practice of your profession. Not many years ago, even within the present century, the "physician might have been able to comprehend all that then constituted the allied sciences of medicine; but that can never again be possible." "No one can hope, even as the sciences now stand, and much less as they shall further advance, to obtain a foremost knowledge of them and of medicine at the same time." The student of medicine, then, may well stand appalled when he bears the demands which the teacher of physiology would make upon him, and when he hears of the importance and primary necessity which exists for his becoming a physiologist before he is a physician. But, gentlemen, be comforted; the hypothesis is false. "The clinical physician knows that the phenomena of disease are not explained by the phenomena of healthy texture nor by the action of healthy organs."* You must have a sound knowledge of the groundwork of physiology to begin with; but all the minuter portions, all original investigations and experiments, had (unless you have unlimited time at your command) better be postponed until you have acquired a certain knowledge and familiarity with the other branches of professional study. "If all medical students had fifteen or twenty years at their disposal, and could dedicate them all to professional education, we might pardon a little innocent declamation in displaying the rich and varied field of knowledge about to be disclosed to them; but even then sober truth would compel us to confess that the field so pompously displayed far exceeded in extent what the best minds could hope to compass, even in fifteen or twenty years. When, however, we recollect what space of time the majority of men so addressed really can give to their education, the whole affair becomes inexpressibly ludicrous."† Let us consider for a moment what preliminary training is necessary in anyone who aspires to become a physiologist. By a physiologist I do not mean one who simply has had his hand trained to perform various mechanical operations and his eye taught to observe certain phenomena, but one who, in addition, has a mind trained to draw the logical inferences from the phenomena observed. Now I do not say that a man cannot do this latter without a mathematical training, but no other training is so well calculated to "discipline the reasoning faculty, to give the habit of concentrated thought, and to place in the student's hand a weapon indispensable for the thorough mastery of the physical sciences"; and for this reason I regret that in the Cambridge Natural Sciences Tripos more mathematical knowledge is not required of the candidates. Again, the progress of physiology has always been influenced by discoveries in physics; but English physicists and physiologists are very wide apart, and this is one reason, perhaps, why physiology in England seems to be so much indebted to workers in Germany, where the natural sciences are based upon the solid and only permanent foundation of mathematical research. You cannot, then, with the time at present at your disposal, be physiologists before you are physicians, and you must be content with a limited knowledge to begin with; improve that knowledge afterwards as you have opportunity; and in the mean time refer your physiological difficulties to the physiologists for solution.

The cry, too, for original research, which has become so fashionable, has not a good influence upon the student. Original research unquestionably is to be encouraged to the greatest extent in those whose training has fitted them for it. But *all* men are not and cannot be educated for discoverers. These stand alone; they become what they are beyond, and often in spite of, their education. You cannot make an Adams, a Stokes, or a Helmholtz out of ordinary human brains, or look for the same results to occur to all individuals trained in precisely the same way as they were. "This would be the same thing as to take measure of all mankind by the proportions of a giant, and make the single wonder of a hundred years the common expectation of every day." There are nevertheless some people who, with a plausibility and an iteration not perhaps commendable, do induce a certain class of persons, generally uneducated, to believe that all students in Cambridge ought to be discoverers. Even in a scientific periodical I saw, not long since, the hope expressed that early research may be the rule at Cambridge instead of the exception. How can a man be fitted for original research unless his mind has been disciplined, unless he has been trained to habits of patient observation, and unless he is acquainted with what has been done by others? And how much patient continuous work does all this require! Place little stress on the acquisition of facts and theories which have been already established; tell the student of science "it is little matter what this or that authority has said, or what the words in which he has spoken—Nature is to be the authority"; "that the essence of the scientific spirit is that it is free, and that true scientific inquiry refuses blindly to submit to authority"; that in the science examinations here less attention should be given to what a man knows of a subject than to his so-called original investigations in it—or, in other words, in a competition for honours in science the competitors are to

* Sir William Gull. † Dr. P. M. Latham.

show, not that they know what other people know, but that they know something in it which nobody else knows;—tell this to the student, and would it encourage him in that continuous study and practice which are necessary to enable him, both in his own observations and in judging the statements of others, to distinguish accurately the phenomena observed from the interpretation given to them? Would he not rather start off on his voyage of discovery an uninstructed and uneducated sailor, without guide or compass? He might possibly discover some unknown region, but there is a greater probability of his suffering shipwreck. The result is that among certain so-called purely natural science men we see little deference shown to the opinions, and little regard of the work, of others—little of that humility which characterises the distinguished workers in other branches of science, but a bold and arrogant confidence in their own opinions and a contemptuous disdain of the opinions of others. This may be modified in the course of years, when, humiliated by their fallacies being exposed by better trained workers, they feel, though perhaps they don't confess, that less original research and more careful and extended acquisition of facts already established would have been better for their peace of mind, their usefulness, and their reputation.

But this cry for originality affects others besides the young student. According to a recent able leader in *The Times*, "rich men are apt to take up study for amusement without adequate discipline or acquaintance with the work of others, and to produce in consequence a good deal of amateur or duplicate work of no great value." And a further result is, that "we get in this country a great deal of popular exposition of fashionable subjects and a considerable quantity of incompetent and paradoxical discoveries."

Be satisfied, then, gentlemen, for the present, to neglect the allurements of original research whilst you fit yourselves for the prosecution of it at no very distant date. Be satisfied to learn what discoveries have been already made, which are acknowledged and accepted as true, and which have a bearing on the profession the practice of which it will be your duty to adorn. In your professional work you will find abundant opportunity for original research in its highest and noblest forms—the relief of pain and suffering, the repair of injuries, the controlling of disease, and the prevention of death. Every case of suffering has its own peculiarities, and your most cultivated discernment and your highest skill will often be necessary to determine its nature and peculiarity and to apply the remedy. And these are the great experiments which, as students, you have now to watch and learn, and which very soon you will have yourselves to perform. Qualify yourselves, then, to understand and utilise all the discoveries which able workers in the different branches of science may make. The next best thing to making a discovery is to utilise it, and very often it is not until this has been done that the grandeur or importance of the discovery is recognised. Prepare yourselves to be practical physicians—not meaning by that title one "who practises the errors of his predecessors," but one who neglects no opportunity of increasing his own knowledge, who is open to receive and to utilise knowledge from every quarter—an observer of nature and careful watcher of natural processes and operations in all their varying forms, and one who gives his time and steady, patient, continuous attention to the work. Do this and you cannot fail to acquire an interest in your profession; and then, when the interest and learning and skill have been acquired, recollect that they are gifts which have been entrusted to you, and which you are bound to use "as a rich storehouse for the glory of the Creator and the relief of man's estate."

SALISBURY MEDICAL SOCIETY.—The annual meeting of this Society was held at the White Hart Hotel, Salisbury, on the 2nd inst. There were twenty members present, and after the election of officers for the ensuing year and an interesting discussion on puerperal fever, which was adjourned, they partook of a cold luncheon. The following is the list of officers:—President: J. Manning, Laverstock. President-Elect: Dr. Pike, Weyhill. Vice-President: Dr. Fox, Broughton. Committee of Management: Messrs. Bennett, Darke, and Straton. Treasurer: Mr. G. Wilton. Secretary: Mr. Bigg, Salisbury.

A Lecture ON HYDATID DISEASE.

Delivered at the Middlesex Hospital Medical College,

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Of all the various forms of parasitic disease that come under the notice of the physician and surgeon, none is individually of more importance than the singular affection commonly designated "hydatids." If, on the one hand, it cannot be said that separate treatises have been written on this subject, it may with equal truth be affirmed that no volume, dealing with the principles and practice either of medicine or surgery, can be regarded as complete if it fail to treat of hydatid disease. In short, the subject has a literature of its own; yet, nearly all that has been written concerning it is to be found in the pages of innumerable journals and professional works. In this connexion also several treatises on helminthology play no inconspicuous part.

In my "Introduction to the Study of the Internal Parasites," published eleven years since, I gave a careful *résumé* of the subject as it then stood, more particularly in relation to the development and mode of origination of the disease. Since that time few of our writers on hydatids have touched upon the sanitary and endemic bearings of the subject; a notable exception, however, occurring in the case of Dr. Murchison, F.R.S., who, in the early part of his well-known essay "On Hydatid Tumours of the Liver," makes reference to the researches of Davaine, Eschricht, Hjaltelin, and others, in reference to this part of the question. Amongst other contributions, those by Macgillivray, Cleghorn, Robertson, and Begbie, and especially those of Dr. Hearn,* are particularly noteworthy.

Whatever motives may have operated to prevent certain authors from making themselves acquainted with the more recent results of entozoal research, I am confident that not a few physicians, surgeons, and general practitioners have persuaded themselves that no purely scientific experiences in respect of hydatids are of the slightest practical value. Such a false conclusion can only proceed from want of accurate knowledge, for, if the question of sanitation is to be allowed to play its legitimate part in medical education, an acquaintance with what may be called the scientific aspects of echinococcus disease will be found to be of the very highest practical value. However much good the surgeon may accomplish by the use of the scalpel and trocar, the profession at large is not so lacking in the best principles of humanity as not, above all things, to desire to check the prevalence of this or any other equally fatal disorder.

The medical profession, on purely philanthropic grounds, has of late years been straining every nerve to diminish the number of preventable diseases by insisting on the observance of certain well-known sanitary rules; therefore I am only acting in perfect harmony with this collective effort when I undertake to call your attention to the prevalence of this disease, partly in the hope of inducing persons in authority to adopt measures for preventing its progress. Let me add, as an incentive to patient researches of this kind, that, notwithstanding the numerous cures resulting from surgical interference, there will always remain a considerable proportion of cases that are utterly beyond the reach of professional skill. In some of these cases the incurables are destined to endure torture of a prolonged and most distressing kind.

If, at the outset, I mention a few of the principal points to which I desire to direct your attention, you will the better appreciate the great extent of the subject before us. In the present series of lectures I can only dwell on one or two points of great interest; nevertheless, it is my hope

* Kystes Hydatiques du Poumon, &c.

(at some time or other) to explain to you whence these entozoa come, and what is their essential nature; how they are developed, and what are the varied pathological characters they are apt to present; in what countries they are most abundant, and what is the cause of their comparative prevalence in any given locality; in what parts of the human frame, as well as in what organs of animals, they are most liable to take up their residence, and to what extent they thus become dangerous to life; what particular *rôle* they play in the endemic production of disease, and whether, in this regard, they sensibly raise the annual rate of human mortality; whether they are liable to be mistaken for other formations, and, if so, whether any of these spurious productions are of parasitic origin; to what extent hydatids are amenable to surgical treatment, and whether there are any grounds for believing that drugs can effect a radical cure.

The above constitute a mere sample of the numerous questions that must readily force themselves upon the mind of any person who has taken the trouble to look at the subject of hydatids from all the points of view that are open to him. Here, as in all other matters of equal or greater importance, what we above all things require to inculcate is, a thorough breadth of view based on an extended grasp of facts; for by such a process alone can we hope to advance any of the many departments of the healing art. Let any student, or, for that matter, let any medical man, seriously set himself the task of mastering the details of hydatid disease, and I venture to think that, if he should eventually succeed, he will then be in a position to realise, for the first time, perhaps, in his life, the extraordinary part the entozoa, as a whole, are destined to play in the economy of life. He will certainly know something of the terrible havoc these creatures are capable of making amongst human and animal bearers alike; and possibly a question may at the same time enter his head as to how it happens that, notwithstanding the fatal power of the entozoa, no one ever hears of them in connexion with the reports of the Registrar-General. From the negative aspect of our bills of mortality, one might, as regards the entozoa, be led to imagine that these creatures are amongst the most harmless things in the world. Some of the facts brought forward below may possibly help to dispel that illusion.

The brief record which I communicated to the pages of THE LANCET some years back had reference only to the *various kinds* of entozoa contained in certain museums of the metropolis, including one provincial collection; but, as expressly stated at the time, the report was only intended to be preliminary to others of a more complete and special character. I did, indeed, indulge the hope of being able to visit all the chief museums in the British Isles, in view of obtaining statistical evidence in connexion with the distribution and prevalence of the entozoa. The labour, time, and expense involved in such an undertaking, however, prevented its accomplishment.

I have now personally examined upwards of a thousand separate preparations of entozoa contained in our public collections, and of these as many as 788 are preserved in the anatomical and pathological museums of the metropolis. By this careful inspection I have obtained more or less accurate knowledge of at least 200 unpublished cases of hydatid disease, at the same time acquiring much useful information respecting other parasites. In respect of hydatids, most of our museum shelves are more or less rich, and not a few of them exhibit specimens that are altogether unique. Of course the number of specimens in any given collection does not afford any true criterion of its relative value as an entozoal depôt, so to speak; nevertheless, as will be seen by the facts that I shall publish very shortly, certain of the collections are particularly strong in this respect, both numerically and otherwise. As a rule, each preparation refers to a single case only; but here and there two or more preparations are concerned in one and the same case. Several of the collections were repeatedly visited by me at intervals, and to some of them I have made considerable additions in the way of specimens. In many instances I took occasion, and generally with the approval of the respective curators, to correct errors that had very naturally crept into the catalogues.

After making the necessary deductions on the score of the uncertainty attaching to the true seat of the disease, I find I have to account for 192 separate cases of hydatids as represented by the contents of our museums. If, in the next place, I add to these the 135 cases that I had previously placed on record from other sources, we shall obtain a total of 327 cases available for statistical purposes. If, yet further, an analysis of these cases be made and compared with the statistics already furnished by Davaine, from a rather larger number of examples, then, by reducing the whole to the lowest number of practically available terms, we shall at length obtain a result which, although it should be only approximatively correct, is nevertheless of great value and significance. The statistics stand as follows:—

Organs affected.	T. S. C.	Davaine.	Total.
Liver	161	165	326
Abdomen, pelvic cavity, and spleen	45	26	71
Lungs	22	40	62
Kidney and bladder	23	30	53
Brain	22	20	42
Bones	16	17	31
Heart, and pulmonary vessels ...	13	12	25
Miscellaneous	25	63	92
Grand total	327	373	700

Notwithstanding certain apparent differences, the statistics separately obtained by Davaine and myself show a remarkable correspondence. Thus, in the case of those organs respecting which no dispute could well arise as to the real seat of the disorder, the results are tolerably uniform. This is seen in the case of the liver, brain, heart, and bones. Even in those instances where our results do not appear to correspond, the explanation of the discrepancies is very simple. One example will suffice to illustrate this point. The twenty-six abdominal cases credited by me to Davaine's record are all placed by him under the heading of "Pelvis," whilst all those cases that I have myself placed under the abdominal series not only include hydatids of the pelvic cavity, but also two from the spleen and nineteen from the peritoneum and intestines, besides others. It would be wasting time to illustrate the matter further, but it is clear that if our methods of allocation had been precisely the same throughout, our statistical results would have maintained a still more marked degree of correspondence.

As the facts now stand (in the table above), much instruction may, I think, be derived from their consideration. I pray you to notice in particular the number of liver cases, comprising very nearly 44 per cent. of the entire series. Observe also the not inconsiderable number of cases in which the entozoon has taken up its abode in organs of vital importance. If statisticians would obtain an adequate conception of the fatal capabilities of parasites, they are bound to consider such data as are here afforded. Let us look a little closer into the matter. In 6 per cent. of all these cases the bladder-worm had found its way into the brain, and of course proved fatal to the patients; in about 3½ per cent. more they took up their residence in the heart, also proving fatal; whilst of all the other cases put together I reckon that not less than 15 per cent. were concerned in bringing about the death of their hosts. You may be well assured, indeed, that I understate the fatal capabilities of echinococcus disease when I express the conviction that hydatids prove fatal to 25 per cent. of all the human victims they attack. These data ought to have some interest for statisticians and officers of health.

It will, perhaps, be said that my tables and calculations alike afford no sort of notion as to the relative prevalence of the disorder in England in contrast with other endemic affections. Of course not. It has given me some months of labour to make out this much, or rather this little, and I am fully aware that a great deal more remains to be done; moreover, for the solution of subsidiary questions, additional data of another order must be procured. By the subsequent publication of the facts above alluded to in detail, my hope will be to throw light upon a subject which no one has as yet adequately handled from a sanitary point of view.

IN consequence of the reappearance of yellow fever at Pernambuco, arrivals from that port are placed under strict quarantine by the Portuguese government.

ON THE

PHYSICAL CAUSE OF THE PRESYSTOLIC MURMUR.

BY ALEXANDER HARVEY, M.D.,

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(*Concluded from page* 820.)

7. IN view of what has now been affirmed as to the condition of the ventricle at the time the auricle contracts—namely, that it is already full,—it may be asked, What purpose does the action of the auricle serve? Just prior to this, "the whole heart is in a passive state"*—a state of repose, of inaction. To me, the action in question has long seemed like the word of command to "Fire!" or like the pulling of the trigger, or like the application of a stimulus to a quiescent muscle. Just enough more blood may be thrown into the ventricle (a drop or two) as is requisite to set it agoing—enough to give the ventricle, so to speak, a tap on the shoulder, just to say "move on." Apart from something like this, I can see nothing in the action of the auricle.

8. In the healthy state the action of the auricle is noiseless, inaudible—a circumstance in keeping with the fact of its being an insignificant or a "comparatively slight" affair. The first natural sound is due to this or that within the ventricle, not to anything (as Laennec fancied) connected with the auricle; and the second natural sound is due to the recoil of blood against the semilunar valves. All things considered, it seems to me difficult to understand how such a murmur as that called the "presystolic" can have any existence in fact. I can understand how the first rush of blood from and through the auricle into the ventricle, at the beginning of the diastole of the latter, might cause a murmur, from the blood impinging on a diseased and narrowed and rigid orifice in its passage through it. In a flooded river one hears the roar the waters make in passing through the arches of a bridge, although in the natural state of the stream the waters pass noiselessly. And one can understand that the murmur in question might be heard all through the diastole. If so, it should be heard at the time of the second natural sound, or (if drowned by this) directly after it, and all the time the diastole lasts; not, as alleged, just before the first natural sound. In short, it should directly follow the second, not directly precede the first. It should be a postsystolic or a diastolic, not a presystolic murmur. Anyhow, if there be such a murmur as this presystolic, occurring simultaneously with the action of the auricle, the physical or physiological cause of it cannot, it seems to me, be that assigned by Professor Gairdner,—namely, the forcible emptying of the auricle into the ventricle.

10. These notes are submitted simply with the view of eliciting further inquiry. I make small account of my never having heard the presystolic murmur; something, however, of Dr. Stokes never having heard it. Yet a positive fact is always worth a cart-load of negative ones, unless the alleged fact can be proved to be "a false fact." And I am quite disposed to think that Dr. Gairdner and those that go along with him in recognising that murmur, and in finding it to be invariably associated with a contracted auriculo-ventricular orifice, even when occurring, as it very rarely does, on the right side, must "have data to go upon relative to that affair," as the cautious Bishop Butler said one dark night in his garden to his chaplain regarding a very dark subject. It does not follow, however, that Dr. Gairdner's explanation of the murmur is equally sound as his interpretation of its import.

11. In conclusion, I cannot forbear remarking that it has long seemed to me that too much account has been made of the auricles as *constituent* parts of that great organ, the heart; and that our physiologists have been led into some errors from their doing so. A sentence or two from Dr. Kirkes's excellent "Handbook of Physiology" will serve to illustrate my meaning: "The heart's action in propelling the blood consists in the successive alternate contractions and dilatations of the muscular walls of its two auricles and two ventricles. The auricles contract simultaneously; so do the ventricles; their dilatations also are severally simultaneous; and the contractions of the one pair of cavities are synchronous with the dilatations of the other."

One would suppose, from this representation, that the auricles stand on a like footing with the ventricles in relative importance and in the manner in which they comport themselves; the auricles, full, pouring their whole contents into the empty ventricles; the ventricles, in their turn, pouring their contents into the great arteries, and thus emptying themselves, during which time the empty auricles are being refilled. This, I am persuaded, is the kind of notion one would form on reading the statements made by Dr. Kirkes; such is, in fact, the notion most students do form from like statements in the books they read. Not unnaturally was Laennec thus led to assign the first natural sound to the action of the auricles—the second to that of the ventricles.

It is true, indeed, that Dr. Kirkes recognises a double filling of the ventricles, or, to be strictly accurate, a double ingress of blood into them: one concurrently with the diastole, and *passive* as regards the auricles; the other, at the time the auricles contract, when, he says, they "empty their contents into the ventricles." Here, again, we are confronted with this word *empty*. What does he mean by it? By his own admission, the ventricles are already so far filled with blood, and can now only receive some further supply. Does he mean that they now empty themselves completely, or in part? They are themselves *then* at their fullest—full even to distension; the ventricles, on his own showing, are then also *so far* full. In what sense, then, do the auricles at this stage "empty their contents into the ventricles"?

For my own part I have long looked on the auricles as being essentially extraneous to the heart—as being mere appendages to it—pouches of the great veins leading to it, tipped with a set of muscular fibres; and furnished with these on set purpose, so to speak, of giving the word of command to the true heart to be off and doing. Certainly, the two sets of cavities do not stand on exactly the same footing; and I think that what goes on in the auricles demands reconsideration at the hands of physiologists. The ventricles do empty themselves thoroughly each time they contract. The auricles do not, nor can they. Why then say they do? Accuracy in the expression of facts is conducive, if not essential, to the clear apprehension of them.

Another point: the auricles are said to act simultaneously, and the ventricles to do the like. I have often asked myself how the case stands in the state of the heart which obtains when the presystolic murmur is heard, or alleged to be heard—namely, a narrowed, often extremely narrowed, contracted auriculo-ventricular orifice on the left side, while that on the right side is sound. It is to be presumed that, by reason of the narrowing, the left ventricle will take a longer time to refill than the right. Is it so in fact? Does the healthy right heart wait for the diseased left heart?—accommodate itself to its needs and to the time these needs involve? Do the two sides, in this condition of the organ, ever work out of time or tune?—the right auricle, in particular, acting before the left is ready to act. Has "irregular" action of the heart anything of this quality in it?

This whole set of remarks may seem to some, and to my friend Dr. Gairdner in particular, a "much ado about nothing." I hope not. There are some points regarding the action of the heart that seem to me to demand reconsideration, or a more precise statement of ascertained facts; and something at least will be gained if Dr. Gairdner will explain what he precisely means by the "forcible emptying" of the auricle into the ventricle, and how *in the circumstances*—i. e., in the case of a contracted auriculo-ventricular orifice—the naturally noiseless action of the auricle becomes audible, and in such manner as to prove not merely a valuable but an infallible diagnostic sign. I may myself have greatly overestimated the quantity of blood poured into the ventricle during the diastole.

Aberdeen.

* Kirkes.

ON A CASE OF TRAUMATIC STRICTURE OF THE ŒSOPHAGUS IN A CHILD FOUR YEARS OF AGE.

BY RICKMAN J. GODLEE, M.S.,
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IF the various handbooks of surgery in vogue at the present day be consulted, it will be found that many of them unite in deprecating the use of the bougie in cases of stricture of the œsophagus, from whatever cause it may arise. Take, for example, the concluding passage in Mr. Pollock's able article in "Holmes's Surgery," second edition, vol. iv., p. 495:—"We cannot recommend the use of bougies in the treatment of stricture of the œsophagus. In its early stage curiosity may perhaps require to be satisfied by an exploration, so that the exact seat of the stricture be ascertained, and to such a proceeding there is no great objection. But beyond this very little, if anything, is gained by such treatment." It is partly for this reason, and in the hope that surgeons may not be deterred from attempting any treatment in similar cases, and partly because of the rarity of the affection in so young a child, that the following case has appeared worthy of being placed on record.

The patient, F. A. W——, a girl about four years old, came under my care whilst in charge of the out-patients at University College Hospital during the summer of last year. The mother said that some ten months previously the child had swallowed some strong acetic acid intended for application to her father's corns, and I am informed by the medical man who then had charge of her that considerable inflammation of the fauces was the immediate result. Between the time of swallowing the acid and her admission to the hospital she had taken no solid food whatever, and had swallowed fluids with very great difficulty. The mother's account was fully borne out when the child was placed under the influence of chloroform on August 21st. It was then found that while a French gum-elastic bougie, equal in size to a No. 6 English catheter, could be passed into the stomach, the next size was firmly grasped by, but could not be made to pass through, a stricture which was situated a little below the upper end of the œsophagus. At this time the child was pale and anæmic, and showed evident signs of emaciation.

It was decided to attempt gradual dilatation; but the progress was at first very slow, and this for two reasons: in the first place it was thought necessary to administer chloroform at each attempt, which greatly complicated matters, and was afterwards found to be quite needless; and, in the second place, because a small gum-elastic bougie is so flexible that very careful direction is required in order to prevent it from curling up instead of entering the narrow opening in the œsophagus. In this early stage of the treatment the instrument was passed every two or three days; but it was afterwards found that the dilatation proceeded more rapidly if intervals of a week, or even longer, were allowed to elapse. By Oct. 16th, or in eight weeks' time, an advance of two sizes (English) was all that had been gained; but as the instruments became larger, and therefore more manageable, the process was much less tedious. Thus by Nov. 8th, or in three more weeks, a size equal to a No. 13 could be passed; and by Dec. 7th, or a month later, a No. 19 entered easily.

The patient was at this period unable to attend for three weeks, at the end of which time it was very gratifying to find that the No. 19 passed, if possible, more easily than before; and an interval of a month was accordingly allowed to elapse, at the end of which time not the slightest attempt at contraction had taken place. Between this date and May 5th, 1875, instruments were passed every week, because it was thought advisable to carry the dilatation a little further; and when she last attended, on June 2nd, after an absence of four weeks, the satisfactory result was obtained that a bougie $\frac{7}{16}$ in. in diameter, which at the previous sitting had been very tightly gripped, passed readily into the stomach.

As there do not appear to be any data to show the natural size of the œsophagus in children, a few observations have been made on the dead body. The diameter is, as is well known, slightly less at the upper end than elsewhere, and at the cardiac orifice the tube is very considerably dilated, but with these exceptions the size is very uniform. The measurements were made with a cone of wood, graduated to sixteenths of an inch, which was inserted without the employment of any force. It is found that the diameter varies somewhat in children of the same age and size, at least in the cadaver, but the following numbers may be taken as a rough approximation to the truth:—Adult, $\frac{4}{4}$ in. to 1 in.; ten years, $\frac{3}{4}$ in. to $\frac{4}{4}$ in.; three to five years, $\frac{2}{4}$ in. to $\frac{3}{4}$ in.; one year, under $\frac{2}{4}$ in. Thus it will be seen that the normal size of the unstretched œsophagus has been reached, though of course it is not pretended that the stricture is fully dilated, for the instrument is still held by it more or less firmly.

Very great advantage has been found in the employment of conical and probe-pointed bougies; in fact, in the present instance any attempt to pass an ordinary blunt-pointed instrument of the same size as the stricture has always proved ineffectual.

At present the child is fat and healthy, and eats anything that is put before her—a dinner of beef-steak pudding, the mother told us on one occasion, though she sometimes experiences a little difficulty with a particularly large morsel. Of course the question presents itself as to what is to be the termination of the case; there can be no doubt that it will never be safe to allow any long period to elapse without passing a bougie, but it remains to be proved experimentally how long this period is to be. It seems quite clear that no contraction will set in in the course of a month, but even if she were condemned to the very slight inconvenience which it entails twelve times in the year, it is certain that her position is much more comfortable than it would have been had no treatment been attempted, if indeed a fatal termination had not already been the result.

Henrietta-street, Cavendish-square, W.

ON THE

TREATMENT OF DIFFERENT FORMS OF HEADACHE.

BY WM. HENRY DAY, M.D.,
PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

IN an interesting communication "On the Treatment of Headache from Intracranial Disease,"* Dr. Moxon refers to the scarcity of writers on headache, and says "it is not easy to get good guidance on the subject," an opinion in which I concur. Headache is such a common attendant on many diseases, especially the acute diseases, that it is naturally looked upon as a mere symptom.

I do not altogether agree with the classification adopted by the late Dr. Wright and some other writers. Thus, sick headache is classed as dependent on the digestive system, when it really belongs to the nervous system. The brain is the first organ to take offence. Clinical experience inclines the scale of probabilities in favour of a nervous and not a gastric origin. It is the nervous system which is primarily at fault, and the digestive system which is thrown out of order in consequence. Sick-headache is a form of headache not always provoked by error or excess in diet, but belongs to nervous and excitable temperaments. It is commonly met with in children and delicate women, when the most regular diet has been observed, and the stomach and bowels are in no way disordered. I have known people, especially young persons of both sexes, suffer periodically from this form of headache, and attended even with bilious vomiting. They have clean tongues, clear eyes, pale urine, and healthy motions. Over brain-work, fatigue, late hours, and excitement will bring it on, and when these habits have been discontinued they will get relief, and go on for months with-

* THE LANCET, May 29th, 1875.

out an attack. Some young women suffer severely before each catamenial period, and especially if they are subject to dysmenorrhœa. The vomiting of a little bile no more admits of any headache being classed as bilious than the vomiting of bile in severe sea-sickness deserves to be ascribed to excess of bile in the system. In the case of a young gentleman recently under my care, of very nervous and anxious temperament, and who suffered from this sick-headache, I advised that between the intervals of the headache he should take bromide of ammonium in fifteen-grain doses, with five grains of citrate of iron in an ounce of water, twice a day. He continued this remedy for six weeks, and at the end of five months I heard that he had not suffered from any return. The excitement of travelling to London after this long interval of perfect health so upset his nervous system, that it brought on one of his worst attacks, attended with giddiness, confusion of ideas, and sickness. Headache, known as nervous headache, dependent on anæmia, neuralgia, leucorrhœa, mental and bodily fatigue, and prolonged anxiety, belongs to this class. It particularly attacks persons of delicate sensibility and weak organisation. The pain may extend from the forehead to the occiput or the vertex, or one temple may be the chief seat of suffering.

Again, under the heading of bilious headache, Dr. Wright subdivided it into two forms, one arising from the "accumulation of bile in the system," and the other from "exuberant secretion of bile," which to my mind is an unnecessary refinement.

"Wisdom may entangle itself in over-niceness."

Among children I have classified headaches as follows:*

1. Cerebral headache, attributable to injury or to chronic or acute inflammation.
2. Gastric headache, from intestinal and hepatic derangement, known as bilious headache.
3. Epileptic headache.
4. Febrile headache.
5. Headache from anæmia, neuralgia, &c., constituting nervous headache.
6. Headache depending on some intricate change in the cerebral membranes or tissues of the brain.

I have alluded to a type of headache which I have termed "cerebral headache." It follows remotely on a slight blow or injury received at some earlier period which has escaped notice at the time, and this has led to a disturbance in the brain circulation and an interruption to its functions. The proposition I would endeavour to establish amounts to this—that an injury, barely sufficient in some instances to shake the contents of the brain, will in nervous or delicate children, or where hereditary predisposition to nervous disease is strong, awaken this character of headache, even if it does not lay the foundation of organic change. The head has in some instances only revealed its weakness when the strain of school-work has first been put upon it.

I have thought the headache of epilepsy and fever worth especial notice. The frequent occurrence of epileptic seizures shakes and disturbs the whole cerebral mass, and by impairing the nervous structure causes headache having no very special features. I have met with some distressing cases of headache from this cause, lasting for days and even weeks together. Again, headache is a common accompaniment of fever in young and robust subjects, and cold affusion, and even the application of leeches, have been required to subdue it. In typhus and relapsing fever it is oftentimes severe, and is among the chief symptoms we have to combat. This is a form of headache symptomatic of a toxæmic condition of the blood, and from this cause we may have headache due to gout and rheumatism, syphilis, or Bright's disease.

The last form of headache, No. 6, is one possessing much interest. But to this wider field of inquiry, which I have already attempted elsewhere, the space at my disposal does not admit of any more than a passing allusion. I may observe that the first manifestations of illness are those of lethargy and inactivity. Headache is the first striking symptom that attracts notice, though the health may have been gradually declining, and the child losing flesh and strength. Bad food and clothing, foul air, and all the attributes of poverty, are among the common causes. Consumption, insanity, nervous disease, and syphilis, are often traceable on the father's or mother's side. Boys who show an aptitude for learning are sometimes victims to this form of headache. After any mental effort they become listless and variable in temper and manner, sometimes dull, and at other times fidgety and quarrelsome. The pulse is weak; sighing and yawning are frequent symptoms; the headache is constant, and the appetite poor. It is never so overwhelming in its severity as a sick headache, but is more continuous, and may last for days and even months together. The child easily becomes wearied, and falls off into sleep in the daytime, from which he does not awake refreshed. These cases are insidious in their origin, and, until headache is complained of, no decided symptoms attract notice. There is an obscure stage of debility and nervous prostration preceding this, and the evil is increased by continuance at school, deficient food and clothing, or severe moral discipline, on the ignorant assumption that the child is wayward and ill-tempered.

Bromide of potassium is a great remedy in these cases, and under its use the headache diminishes, the irritability passes off, and refreshing sleep is obtained. All the symptoms return with renewed force if the remedy is discontinued too soon. The special therapeutic effects of the drug are only to be gained by small doses, and iodide of potassium should be combined in still smaller doses with it. The bromide and iodide is the best combination where nervous exhaustion and headache are the leading symptoms. If persevered with, the headache and excitement abate, and so a safe pathway is made for cod-liver oil and other tonic remedies. We must subdue the pain before we can build up the general health. These peculiar brain derangements are successfully combated by the bromide of potassium, and the tendency to degenerative disease of the nerve-centres is arrested.

But this communication is chiefly invited by Dr. Moxon's testimony in favour of the hypodermic injection of morphia. In properly selected cases, this is one of the best, if it is not the only reliable remedy we possess. When the sickness and prostration are extreme, and nothing can be retained on the stomach, not so much as a little iced water—when the extremities are cold and the pulse feeble—when there is intolerance of light and sound, and the patient has been days without getting any relief,—the one-sixth of a grain of acetate of morphia for an adult will be sufficient to ensure sleep, and the patient will wake up without headache, if not well. Sometimes the addition of the 120th to the 80th of a grain of atropia will exert an antagonistic effect, and combat the tendency to sickness which morphia alone frequently excites.

I am glad to find that Dr. Moxon has succeeded with the hypodermic injection of morphia in some cases of headache from organic brain disease. Avowedly difficult as headache is to manage when it depends on structural change, pathological research has proved that hydatid tumours and morbid growths, involving the encephalon and coverings of the brain, may occasionally exist without causing pain. Even when it is most acute and continuous there are generally intermissions which afford the poor sufferer some temporary relief from his anguish.

There is another form of nervous headache happening to some women whose general health has been lowered by frequent childbearing, excessive catamenial discharges, or poverty and anxiety. In these people the sympathetic system is easily excited to disturbance through original delicacy of constitution in some instances, or if the functions of digestion and assimilation are overtaxed, the impression is conveyed to the sensorium by reflected irritation, and agonising headache is the result. The top of the head is hot, the pupils contracted, and the pulse weak and usually slow. There is a sensation as though something was scratching or alive within the head. Days before the attack comes on the patient is irritable and fidgety, and cannot settle down to her ordinary pursuits and occupation. Everything puts her out; her reasoning is gone; she is frequently sick, and her stomach loathes the sight of food. Life is such a burden that she can scarcely trust herself to be alone. This form of headache is due to meningeal irritation, and does not affect the cerebral mass itself unless the pain and suffering do not yield to treatment, and then the whole cerebral tissue becomes involved, and irritability is exchanged for indifference and despair.

Bromide of ammonium given early in the morning, before

* Essays on the Diseases of Children. J. & A. Churchill. 1873.

rising, with sal volatile, or small doses of iodide of potassium with the same aromatic stimulant, will have a good effect, whilst the general health requires attention in the intervals. Scruple doses of bromide of potassium in camphor mixture three times a day will give relief sometimes when quinine and bark in every conceivable form have failed. When it can be procured, change of air and scene do much for these sufferers, by diverting the mind and introducing fresh interests and occupation.

Some examples of this distressing headache have come before me, and in two cases, where the attacks were of frequent occurrence during a period of thirty years, they nearly ceased after the age of sixty. No explanation could be offered for their sudden cessation. And here I would just remark that when all remedies appear to fail in elderly people we should dissuade them from the use of stimulants. As they grow older they grow more indulgent, and increase their daily dose of wine, while they take less exercise, live in hot rooms, and are continually turning round their own narrow circle. They cannot take themselves from themselves. There are headaches even in old people which are purely functional, and yet so rebellious to treatment that we are often disposed to regard them as due to organic change.

Manchester-square, W.

A MODIFICATION OF DR. RUTHERFORD'S FREEZING MICROTOME.

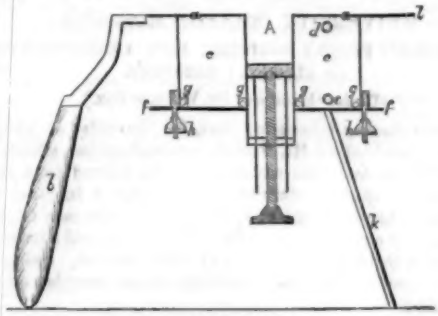
BY WILLIAM JAMES FLEMING, M.B.,
ASSISTANT TO THE PROFESSOR OF PHYSIOLOGY, GLASGOW UNIVERSITY.

THE advantages derived from the examination of tissues in the fresh state are universally acknowledged by microscopists, but no means have hitherto been devised by which, in many instances, this can be effected except the hardening influence of cold. The difficulty of making frozen sections has prevented this process from being adopted with the frequency to which its merits seem to entitle it. A great advance in the mechanical appliances at our disposal for this purpose was the Stirling section-cutter surrounded by a freezing mixture contrived by Dr. Rutherford, and described in THE LANCET in 1873, vol. ii., p. 108. The objection to it is its cumbrousness and the difficulty which its size adds to the necessary manipulations. This same fault entails that the whole machine be firmly fixed—an arrangement which, in my opinion, very much reduces the value of any section-cutter, as it deprives the operator of the great assistance to be derived from the movement of the section upon the razor. It often occurs in practice that, if an embedded object is held in the left hand, valuable assistance in making fine sections can be derived from slight movements of rotation, elevation, or depression, given to overcome some hitch which is noticed in the cutting of the razor edge. If the object to be cut is fixed, this power is of course lost. These considerations have led me to devise the instrument figured here.

The principle adopted is to freeze the substance in a Stirling's section-cutter by causing fluid, reduced to a low temperature, to flow round it. The mechanical means by which this is effected will be easily understood by reference to the accompanying section.

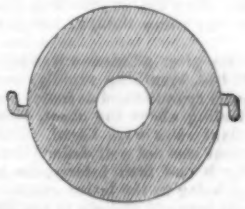
The manner of employing it is as follows:—The substance to be cut is placed in the cylinder, about half an inch from the top, imbedded in scraped potato, muscle, brain-substance, or other suitable material. The tube (*e*) is connected by an india-rubber tube with a worm of block tin immersed in a freezing mixture, and placed a few inches higher than the section-cutter. The other end of the worm is connected with a large funnel suspended above. An india-rubber tube is adjusted to *d*, and led into a suitable receptacle. Into the funnel is now poured a quantity of weak spirit, just strong enough not to freeze at 0° F. (one part methylated alcohol, and two parts water is sufficient). This of course runs through the worm, and is thereby reduced to a low temperature (say 10° F). Then it fills the chamber (*c*), running in as we saw at the lower tube (*e*), and out at the upper tube (*d*) into the vessel placed for its reception. As soon as most of the spirit has come through, the india-rubber tube conveying it away is compressed, and the contents of the vessel are returned to the funnel (this time at a very low temperature). After this has been repeated a few times (in about fifteen minutes) the sections may be cut with a razor with perfect facility.

The instrument is provided with two legs, *k*, which with the handle form a tripod upon which it stands very conveniently. The upper plate, *a*, is prolonged into a beak, *l*, which is rested upon a table or block, while the instrument, being grasped by the handle, remains completely under the control of the operator. The vulcanite handle, from its non-



Scale one-third actual size.

A. Cylinder of ordinary Stirling's section-cutter. *a*, *a*. Plate of ditto. *b*. Handle of brass and iron covered with vulcanite. *c*. Brass chamber surrounding A entered at top and bottom by two tubes, *d* and *e*. *f*. Movable bottom plate (Fig. 2, plan of this plate), which, when the nuts *h h* are screwed up, fits watertight by the aid of two india-rubber rings sunk in grooves (*g g*, *g g*). *k*. One of the two legs forming with the handle a tripod stand. *l*. Beak to rest upon table or block when in use.



conducting properties, prevents the heat of the hand influencing the result or the cold of the instrument affecting the hand. The spirit, of course, does over and over again, and is, therefore, no appreciable expense. Two steel guide-rods are introduced into the cylinder to prevent the piston rotating. In practice I find that if the screw is kept well oiled, there is no necessity for the introduction of spirit around the piston-rod, as recommended by Dr. Rutherford.

The advantages claimed for the instrument are, that it enables us to make fine sections of the softest tissues at once, and while they are in the fresh state. It is very handy, and when the subsidiary apparatus is once arranged, can be employed at any time with little trouble. It can be used as an ordinary section-cutter, and, indeed, for this purpose seems peculiarly adapted, as the arrangements before referred to enable it to be retained under the control of the left hand, an advantage not possessed by any other form of section machine with which I am acquainted. The microtome can be procured from Mr. Hilliard, Renfield-street, Glasgow.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Dr. Fincham and Dr. Sturges have been appointed joint Lecturers on Medicine. In the emergency caused by the death of Dr. Anstie, these lectures were last session temporarily undertaken by Dr. Basham and Dr. Fincham. For the chair of Materia Medica, vacant by the resignation of Dr. Sturges, Drs. Donkin and Hall are announced as candidates. Mr. Malcolm Smith, M.B., M.C. Edin., has been appointed Demonstrator of Anatomy. Further steps have been taken to complete the Dental Department by the appointment of Dr. Dupré, F.R.S., as Lecturer on Metallurgy, and Dr. Allchin on Dental Anatomy and Physiology.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

RHEUMATIC FEVER; CARDITIS; FREE ADMINISTRATION OF ALCOHOL; RECOVERY.

(Under the care of Dr. WILSON FOX.)

THE following interesting case, for the notes of which we are indebted to Mr. Garlick, house-physician, affords a good illustration of the advantages to be derived from the free and unsparing administration of alcohol in cases of carditis. Another point worthy of note in the case is the outbreak of a purpuric eruption after the internal administration of iodide of potassium and iodide of iron. Such an event is unusual, but has been observed and recorded more than once.

The patient, a married woman, aged twenty-three, was admitted January 25th. The chief points about her history were, that she had suffered from an attack of rheumatic fever in infancy, and thirteen weeks previous to her admission from inflammation of the kidneys. She was confined on November 24th, 1874. The present illness commenced a fortnight before admission (Jan. 10th), when she had, after catching cold, an attack of rheumatic fever, all the joints being affected one after the other. She stated that she had bronchitis at the same time, and expectorated much yellow phlegm.

Her state the day after admission was as follows:—She was propped up in bed, breathing rapidly, working her alæ nasi, and was slightly cyanotic and anæmic. She complained of an oppressed feeling about the chest, over which some sonorous and sibilant râles were heard. Pulse 128, weak. The heart's apex-beat was not well defined, but the impulse was felt in the fourth and fifth interspaces in the nipple line, the maximum being in the latter space. There was a soft, long presystolic murmur audible at the fifth interspace one inch inside the nipple. Temperature at 11 A.M. 100·4°, at 7 P.M. 101·6°.

Jan. 27th.—She was breathing more rapidly than on the 26th, 52 in the minute. Pulse and respiration ratio as 2·5 to 1. She complained of pain in the chest. There was dulness over both backs, with weak tubular breathing on the right side. Ordered as much beef-tea and milk as she can take. Administration of brandy commenced in the morning, and increased at 11 P.M. to twelve ounces, one ounce every two hours, when the pulse became still more frequent and weaker. Maximum temperature 101·8°.

28th.—There was some dilatation of the right external jugular vein, even though she was propped up in bed; respiration 56. The patient was evidently breathing with more difficulty, and she complained of a cutting pain in the right side. No change in physical signs of chest. She coughed constantly, and with some difficulty expectorated a little aerated, nearly pure, mucus. Pulse small, very weak, quite regular, but very frequent—138.—At 11.30 P.M. the maximum temperature was 101·8°. To take six drachms of brandy every hour.

29th.—No better; had to be propped up very high; complained much of joint pains. The pulse had much diminished in frequency—96 at 12 noon,—but was remarkably intermittent, one beat being as it were left out every three or four beats. No murmur or friction sound over cardiac region, but the first sound was toneless and markedly irregular, two or three short small beats following quickly on one another, and intervening between stronger ones. No extension of the pulmonary disease; no expectoration. Complained much of the pain in the joints.—2 P.M.: Pulse of same character, but weaker. Her stimulant was changed to a mixture of rectified spirit and water—two pints of the former to one pint of water, flavoured with one ounce and a half of tincture of orange-peel. To take half an ounce every hour.—Pulse at noon 98, at 9 P.M. 88, intermittent; temperature at noon 101·8°, at 5 P.M. 102·2°.—11 P.M.: Pulse 88, intermittent and weaker. No murmur over cardiac region, but soft systolic friction at third interspace, left of sternum, also at apex, but very indistinctly; no increase of cardiac dulness. The dose increased to half an ounce every half hour. To be given with champagne or milk as the patient will take it.

30th.—The pulse has not improved, is quite as intermittent and slower than at 9 A.M.; 74. At noon she became unconscious for a short time; face cold; pulse went down to 56 in the minute; she ground her teeth. Complained much of the spirit mixture, and sometimes positively refused to take it.—At 12.30 had an enema composed of one ounce and a half of beef-tea, with half an ounce of the spirit mixture.—2 P.M.: In the last twenty-four hours patient has taken twenty-four ounces of the spirit mixture, that being as much as could be possibly got down. Is continuing half an ounce of the mixture every twenty minutes, with as much champagne as she will take.—11 P.M.: Condition not changed; has had two slight stools, solid; urine contains a trace of albumen. Temperature at 10 A.M. 100·6°, at 9.30 P.M. 99°.

31st.—Pale and cyanotic. The first sound of the heart very deficient in tone, and only the length of the second. She coughed strongly, but expectorated with difficulty; sputa very aerated and mucoid. Pulse 80, sometimes regular for seven beats; very weak. In the last twenty-four hours she took 22 oz. of pale brandy by mouth. When she would not take the brandy enemata were administered with beef-tea, and in this way four ounces were taken, of which three were retained.—9 P.M: Patient's condition much worse; she was half unconscious, and refused to drink the brandy; pulse very weak. Has had two slight stools since 6 P.M., which she passed under her. Passed her urine in bed.

Feb. 1st.—Patient looked brighter this morning; pulse still slow, 88, and very intermittent, but a little stronger. Had taken her brandy much better this morning, and drank about two pints of milk with relish. Did not cough so much, and breathed with much greater ease.

2nd.—Still better, but pulse was slow and intermittent.—At 3 P.M.: She again became worse; excessively restless, groaning with every breath; looked very uneasy. When interrogated she made no definite complaint; stated she was in pain all over, and constantly put her hand over her heart. Breathing more rapid. More cyanotic. Patient looked better in the evening.

3rd.—This morning she was sleeping quietly. Pulse stronger, but quite as intermittent; respiration 32. Complained of slight tenderness when percussed over cardiac region; the dulness had its normal limits. Impulse of heart weak and widely diffused; could be felt in fifth interspace from one inch outside nipple to sternum. No murmur, but first sound roughened. Friction faintly heard at fourth left interspace. Ordered Brand's essence of meat.

4th.—Not so well. Complained of pain over heart region, but there was no friction sound, and no increase of cardiac dulness. Heart-beat very irregular, first sound short and sharp. Pulse weaker. Fair resonance over the backs on both sides, on the left to the tenth, on the right to the eleventh rib. Breath sounds normal, but a little weaker on the right side. No râles. Temperature not above 99° since the 31st ultimo.

5th.—Last night, at 11 P.M., the pulse became perfectly regular and quicker: at 10 A.M. 90 and intermittent; at 11 P.M. 128 and regular. She looked much better this morning, and breathed more easily, 30. Had no pains in the joints. Temperature subnormal.

6th.—Pulse still perfectly regular, 128, though not very strong. Patient quite sensible, and looked much better. Tongue clean, and appetite returning. Still complained of sharp pain over the heart; no increase of cardiac dulness; no friction. First sound of heart still sharp and short. Brandy reduced to sixteen ounces in the twenty-four hours, given at intervals of an hour and a quarter.

8th.—Still continued to improve. Brandy was reduced yesterday to nine ounces. She took custard and eggs with the meat essence. Was a little sick this morning, and pulse became a little irregular.

9th.—Pulse again regular; no more retching. Ordered chicken.

10th.—A weak systolic murmur heard in fifth space just outside nipple; heart can be felt beating as far as two inches outside nipple. Pulse still regular.

12th.—Patient complained again of a feeling of sickness. Pulse 108, regular and strong; temperature 97·6°.

14th.—The joint pains, which have been in abeyance so long, have now settled upon both wrists and shoulders, and there has also been during the last three days a return of fever. She complained of shortness of breath and pain over heart region. Some pericardial friction. No change in area of cardiac dulness. Apex still beat two inches outside nipple; chest resonant all over lung region; breath sounds normal.

18th.—Still some fever and occasional joint pains; friction distinct at apex; pulse regular and strong.

27th.—Temperature above normal, and some flying pains still remained; otherwise patient was much better.

March 1st.—She now had only a little pain in the shoulder. Temperature subnormal for the last four days; pulse 100, quite regular. Presystolic murmur heard on admission again audible; no pericardial friction; no increase of cardiac dulness. Apex of heart in fifth space one inch outside nipple.

7th.—Patient very much better; got up to-day for a short time.

Remarks by Dr. FOX on Feb. 4th.—Rheumatic fever is most serious after childbirth or after disturbance of menstruation. In this case we have orthopnœa, and not very much joint affection (she has had rheumatic fever only once before). She has no pericarditis, and but little endocarditis, but there is evident carditis, with retarded pulse (60), which has come on since the 29th ult. The pulse is very weak and very intermittent, as much as one beat in four or six with four or five fluttering beats in one interval. Pericarditis causes softening of the cardiac substance to a certain depth, and this condition accounts partially for a certain amount of the syncope. The remedy in such cases is alcohol, and everything else in the way of medicine should be discontinued. This patient has been taking twenty-four ounces of brandy in the twenty-four hours. Alcohol is a stimulant to the heart, and is indicated when the pulse is very rapid and feeble, or very weak, intermittent, and retarded. In the former kind of pulse digitalis is very valuable, but in the slow and intermittent pulse it is too dangerous to be tried, for in a case in which there was a pulse of 150 digitalis reduced it to 90, and then, in spite of leaving off the digitalis, and giving stimulants, it fell day by day till it reached 50. In such a case as the present we must give the alcohol with unsparing hand till regularity of pulse is produced. The danger in such cases lies in four directions. We have to fear death from exhaustion, syncope, apnœa, and thrombosis in the heart. So long as the heart contracts efficiently so as to empty its cavities thrombosis will not occur; but as soon as it does not thoroughly empty itself, and leaves stagnant blood between the columnæ carneæ, a clot is likely to arise in these parts.

The patient did not leave the hospital till April 30th, her convalescence having been retarded by occasional returns of joint pains and fever, lasting usually four or five days. For one of these she was ordered, on the 13th of March, a mixture containing five grains of iodide of potassium and five grains of iodide of iron, three times a day. On the evening of the 28th a crop of purpura came out on the legs and feet, lasting three days. A few more spots also appeared on the 15th of April. On the 21st she had an attack of dry pleurisy. On the 30th she was sent to Eastbourne.

LONDON HOSPITAL.

SURGICAL CASES; AUTOPSIES.

(Under the care of Mr. HUTCHINSON.)

ALTHOUGH a fatal result occurred in each of the following cases, for the notes of which we are indebted to Mr. Williamson, house-surgeon, the records are of great medico-legal and clinical value. In the first case it is interesting to note the symmetry of the lesions. The patient had dropped from a height of about 30 ft. and suffered fracture of the calcaneum and of the tibia and fibula in both limbs, although on the right side the fracture was compound and on the left side simple. In the second case the origin and cause of the hæmarthrosis was unusual. The third case is of considerable medico-legal importance. The patient had evidently an ulcer at the time of the accident, and very little force was necessary to rupture the wall of the bowel.

Fall on to the feet from a height; symmetrical separation of lower epiphyses of tibia and fibula.—The patient, a sailor aged nineteen, was admitted on February 22nd. As his ship was leaving the dock he was standing on the rope under a yard unfurling a sail. His foot slipped, and he was left hanging to the yard by his hands. He held on until he was exhausted, and then he fell to the deck, coming heavily on his feet. The height was about twenty or thirty feet.

On admission he was suffering severely from shock; he looked very ill, and his pulse was just perceptible. He had on a large and very stout pair of Wellington boots, reaching above his knees, and these were uninjured. When they were removed a lacerated wound three inches long was seen on the inner side of the right foot, and through this wound a comminuted fracture of the os calcis could be felt. The tibia and fibula were fractured just above the ankle-joint. On the left side there was a simple fracture of os calcis, and the tibia and fibula were broken, as on the other side. Both feet were displaced backwards, carrying with them the lower ends of the tibia and fibula. Reduction was easily effected, and good position maintained by outside splints with foot-piece.

On March 1st he had an attack of erysipelas, affecting the right leg, and two days later a large slough was removed from the left leg. He died on March 4th with a temperature of 106° F.

At the post-mortem, the right os calcis was found to be broken into little pieces, and the scaphoid bone was fractured vertically. The lower epiphysis of the tibia was separated, but there was a slightly irregular line of fracture as well. The fibula was broken through the malleolus. On the left side the os calcis was even more comminuted than on the right. The lower epiphyses of tibia and fibula were separated from the shafts of the bones exactly at the epiphysial line, and they remained connected together. The lungs were small, studded with tubercle, and completely adherent to chest-wall. There was a considerable ecchymosis in front of the spine and behind the peritoneum, extending along the left psoas muscle. The ureters were much ecchymosed. No fracture or other cause for this could be found.

Fracture of tibia and fibula; great effusion into knee-joint.—John A——, aged eighty-two, was admitted on April 15th. He said that he had slipped off the edge of a step, about two feet high, coming down on his left leg, which bent under him. The leg was much swollen, and there was great effusion into the knee-joint. The tibia was fractured at the junction of the upper and middle thirds, but no extension of the fracture into the knee-joint could be made out. The fibula was fractured high up. Three days later the leg was blue and much swollen, with many blisters on it, but the foot was quite warm. The knee joint was very tensely filled with fluid. He wandered a great deal while he was in the hospital, and he had severe bronchitis. He died on April 27th.

At the post-mortem it was found that the tibia was fractured obliquely, and with considerable comminution in its upper third. The fracture did not extend into the joint. The fibula was broken at its upper end, and there was a vertical extension of the fracture into the upper tibio-fibular joint. When the knee-joint was opened it was found to be full of blood. After a careful examination it was concluded that the blood had come from the fractured fibula, passing first into the tibio-fibular joint, and then into the knee-joint through a communication that not unfrequently exists between the two articulations.

Perforating ulcer of duodenum; peritonitis; history of accident.—John H——, aged thirty-four, was admitted May 13th, when he stated that in attempting to jump off a step four feet high his foot caught on the edge of the step, and he fell flat on his face upon the stone pavement. He did not feel very much the worse for the fall at the time, and he was able to carry some sacks of coal without much distress. No

history of previous bad health was obtained, and he had been doing laborious work up to the time of the accident. He was admitted into the hospital twenty-four hours after the fall, and he then complained of great pain in the abdomen. It was distended, tympanitic, and very tender on pressure. His knees were somewhat drawn up, and his breathing was almost entirely thoracic. His pulse was very small and weak, and his expression was anxious. He said that his bowels had not been open for five days. He vomited after the accident, the vomit consisting simply of the food he had taken. He had passed urine, and it was pretty clear. Temperature was 101°. Death occurred in about six hours after admission.

It was thought that he was suffering from peritonitis, set up by rupture of an abdominal viscus, and there was no evidence to show which viscus it was.

At the post-mortem, acute peritonitis was found, and there was a small hole in the duodenum, admitting the tip of a finger. When the duodenum was slit up it was seen to be a circular ulcer with rounded edges, looking almost as if a piece had been punched out. Probably the ulcer had very nearly eaten its way through the intestine, and the fall, though not a violent one, was sufficient to cause perforation. The other organs were fairly healthy. There was no other ulceration either in the stomach or intestines.

The pathologist remarked on the interest of the case with reference to the instances in which a perforating ulcer of the duodenum is found after a burn. Had this man's accident been a burn instead of a fall, it would, except for the time perhaps, have made a very good case of perforating duodenal ulcer following the injury.

ROYAL INFIRMARY, EDINBURGH.

SUBLINGUAL CANCROID ULCER; OPERATION; RECOVERY.

(Under the care of Professor SPENCE.)

For the following notes we are indebted to Mr. Andrew S. Currie, M.B., house-surgeon.

The patient, a man aged forty-four, when admitted on January 6th, stated that about five months before he observed a small vesicle on the left side of the frænum linguæ, about the size of a pea, which ultimately broke, and an ulcer formed. A surgeon was consulted, who applied caustic three or four times; but the ulcer continued to extend, and the patient accordingly came to Mr. Spence for advice, when on the left side of the frænum linguæ there was a small ulcer about the size of a shilling, extending backwards as far as the second bicuspid tooth. The inner edge of the ulcer was hard and everted, and in the centre there was a prominent hard mass; the outer edge was in contact with the gum. The neighbouring glands and the tongue were unaffected.

Mr. Spence operated on the 12th January in the following manner:—An incision was made along the symphysis, and the jaw divided through the median line, and the two portions then held asunder. A ligature was passed through the tip of the tongue, in order that it might be sufficiently elevated. The ulcer was then excised, a periosteum scraper being used to detach it from the jaw. The bleeding vessels were next secured, and holes having been drilled through the symphysis, the sawn edges of the bone were approximated and tied together with silver wire. A piece of drainage-tube was passed from the mouth through the lowest part of the wound to allow the free escape of discharge. The silver wire which was used was rather fine, and as it gave way in a few days, a bandage was required to keep the divided portions of jaw in position. Weak carbolic lotion was used as a mouth wash. The patient progressed steadily to convalescence, and was dismissed cured on the 11th February.

The apparently trivial circumstance of the silver wire used for uniting the divided symphysis of the jaw being rather finer than generally used for that purpose, caused a good deal of trouble in the management of the jaw, as, owing to the wire giving way at an early period, the bone required to be kept in position by bandaging, which is generally unnecessary in such cases. It is a good example of the necessity of looking after the *little* things connected with an operation.

Reviews and Notices of Books.

A Guide to the Practical Examination of Urine. For the Use of Physicians and Students. By JAMES TYSON, M.D., Physician and Pathologist to the Philadelphia Hospital, &c. pp. 182. London: Trübner and Co. 1875.—It might hardly be thought that there was a need for yet another handbook on urinary analysis, so numerous is this class of treatises, and had the present little work been less complete or excellent than it is, we might well have exclaimed against its production. But it has been so carefully and concisely written, and it embraces so much that is valuable, that it creates a place of its own, and is no mean rival to the many similar treatises in circulation. We can only here note a few of the statements contained in the volume. The author maintains that the "heat and nitric acid" test is the best for albumen; while for sugar he places the "reduction of subnitrate of bismuth" on a par with the well-known copper test. The colouring matters of the urine, normal and abnormal, are fully dealt with, and as this is a branch of the subject hitherto much neglected, we are all the more grateful to the author for his admirable exposition of it. We must, however, take exception to the statement that the colouring matters of the blood, when present in urine, are always accompanied by albumen, and we would refer him to Dr. Mahomed's paper on the "pre-albuminuric" stage of scarlatinal nephritis in support of this, hæmoglobin being readily detected by the use of ozonic ether and tincture of guaiacum (a test, by the bye, which Dr. Tyson has omitted) without any albumen being present. After discussing *seriatim* the inorganic and organic constituents of the urine, the author deals with urinary deposits, this section being fully illustrated by figures, but few of which are original. He has come to the conclusion that "pigment flakes," which have been so fully discussed by Dr. Roberts as pigment-containing "celloids," are merely stained markings or fractures on the glass slide, the nature of the staining material being undetermined. The little volume, which is admirably "got up" as to printing, paper, and binding, concludes with brief sections on the diagnosis of renal diseases, the examination of calculi, and a useful table for reducing the metric system into English notation.

Two Years in Fiji. By LITTON FORBES, M.D., L.R.C.P., F.R.G.S., &c. London: Longmans. 1875.—Anyone thinking of making a home in Fiji will do well to peruse this pleasantly written sketch of the kind of life an Englishman may expect to lead there. Although the author makes no pretence to give an elaborate or exhaustive account of Fiji, he has nevertheless collected together a good deal of useful information on a variety of topics, and succeeded in giving what we doubt not is a truthful description of the latest annexation to the British empire. Books of this kind should, in our opinion, be furnished with a good clear map; and the usefulness of the volume might have been much increased if the information on several points had been more definite and precise than it is. The climate of Fiji, although enervating, is healthy enough on the whole; but it is never safe to expose oneself to the breeze that blows off the land after sunset. Dysentery, rheumatism, fever, and ophthalmia are named among the chief diseases; and, with a temperature of 85° F. day and night, prickly heat and so-called Fiji sores are not uncommon complaints. The flora is rich in many poisonous plants; but the knowledge of them is kept a profound secret, and confined to a few families. The men who possess such tremendous knowledge are, as might be expected, universally feared and respected. Surgery, as a science, cannot be said to exist in Fiji; most Fijians prefer death to undergoing a severe operation. They

are fully as liable to the same diseases as the white residents; and dysentery is quite as fatal to the Fijians as the whites. Many natives died a few years ago from an epidemic of influenza, which travelled from east to west, following the course of the trade-winds. They are very despondent when sick; and there is some truth in the common saying that a Fijian will frighten himself to death. They were very much struck with the application of an ordinary scarifier, which made twelve cuts at once on touching the spring; and the operation not only fell in with their ideas of a proper treatment, but the regularity of the marks left on the skin was much admired. The stethoscope was a complete mystery to them. An allusion is made to what is termed "mat fever," apparently an important disease, but we are given no detailed description of it.

Compendium der Electrotherapie zum Gebrauche für Studirende und Praktische Aerzte. Von Dr. MED. R. H. PIERSON. Leipsig: A. Abel. 1875.—This is a thoroughly useful little work, and one which all who understand German and are seeking information on the subject of electro-therapeutics will do well to consult. It contains little or no original matter, but is a very complete and concise compilation of our existing knowledge on the subject. The author divides his work into six chapters. In the first the reader is made acquainted with just so much of the laws of electricity as will enable him properly to comprehend the instruments he will have to use. In the second chapter the facts of electro-physiology are discussed, and in the third a description is given of the varieties of electrical apparatus. This chapter has the merit of not being too long, and of not resembling a tradesman's catalogue, as do many of the chapters devoted to this subject in other works on electro-therapeutics. It would, however, have been improved by the addition of a few woodcuts. The methods of applying electricity form the subject of the fourth chapter; and the fifth and sixth, which together constitute about half the volume, are devoted to its therapeutic applications. In these last chapters all the diseases for which electricity has been employed are taken seriatim, and a few hints as to the most advisable method to be pursued is given in each case. The author cites the opinions of all the best known writers on the utility of electricity in various cases, and Duchenne, Ziemssen, Remak, Meyer, Benedikt, Rosenthal, Cyon, Althaus, Brenner, Hitzig, Reynolds, Poore, and others are frequently quoted. The author seems, indeed, to have a thorough acquaintance with the literature of his subject, and his book, though unpretending, will be found most useful and trustworthy.

On the Nature and Treatment of Asiatic Cholera. By ARCHIBALD BILLING, M.D., A.M., F.R.C.P., F.R.S. Fifth Edition, revised and enlarged. London: J. & A. Churchill. 1875.—Dr. Billing tells us in this little work an oft-told tale, of his own construction. "Cholera is a species of fever"; the first stage of the disease is a cold stage, and so "we see that when medical men are thoroughly acquainted with a disease, they follow, in many instances, that practice which is called indirect, and is the most efficacious." Following out this principle, the author prescribes in cases of cholera tartar emetic and sulphate of magnesia. The above is the gist of a small essay of twenty pages, which are occupied otherwise with scattered details of cases and sundry diatribes directed against a certain manifesto issued in 1848 by the then Board of Health. The author still ignores altogether the stage of premonitory diarrhœa.

Clinical Notes on the Electric Cautery in Uterine Surgery. By J. BYRNE, M.D., M.R.C.S.E.—This book consists of descriptions of a speculum, battery, and instruments used by the author in the treatment of uterine diseases, and of notes of several cases operated on by means of the electro-cautery. The latter are but indifferently given, and cancer has in some of the cases reported been diagnosed on insufficient data. The work adds little to our knowledge of the use of the electric cautery in the treatment of diseases of the womb.

REPORT
OF
The Lancet Sanitary Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

INTRODUCTORY—(*Continued.*)

IN our previous report we enumerated the various channels by which infectious diseases might find entrance to a school, and we pointed out the best means to be adopted to prevent such an occurrence. We now proceed to the consideration of those conditions which more directly affect the general health of the boys.

Sanitary and Domestic Arrangements of the School Premises, &c.

The arrangements of the buildings vary greatly at the different public schools; but we generally find a large school-room where lessons are repeated and sometimes learnt; class-rooms where special subjects are taught; a dining-hall for meals, if the boys are not living with masters in separate boarding-houses; a block of buildings containing dormitories and studies; out-houses for closets and urinals; and the playground, furnished with fives and racket courts, and in most cases with swimming-bath and gymnasium. As a rule, the construction of these buildings is all that can be desired. In the school and class rooms the amount of cubic space allotted to each boy is generally amply sufficient, and means are employed to secure efficient ventilation. In some of the older buildings, however, the ventilation is by no means perfect, and the light admitted is not enough, the windows being sometimes awkwardly placed so as to throw an inconvenient shadow on the book or paper before the boy; but we found that this evil had been recognised, and in many instances steps were being taken to introduce more light, and by a better arrangement of windows to get rid of the inconvenient shadow. As a matter of general guidance, we would recommend that, in the construction of school, class, and dining rooms, 500 cubic feet per head be the minimum allowance; that, in winter, ventilation be secured by the introduction of warmed fresh air, which can be managed very economically by Captain Galton's fire-grate; and that, in addition to the fireplace, the temperature of the rooms be equalised by means of hot-water pipes. In building school-rooms and studies, it is important to have the light always placed on the left-hand side of the student. We noted a considerable improvement in the condition of the privies and urinals to what we remember them some years ago. At all the schools we visited water-closets, in some cases earth-closets, have entirely superseded, or are superseding, the old privies and stinking cesspools; and the urinals we generally found fitted with glazed pans kept well flushed with water, and in all cases were kept sweet and clean. One other improvement we noticed as generally adopted was the separation of each closet by means of a wooden partition. Whilst on this subject we would specially commend the arrangement of closets and urinals as they exist in Mr. C. T. Arnold's house at Rugby: during the day they are shut off from the house, the boys having to enter them from outside; at night they are opened to the house

by means of a passage, so that the boys can use them without having to go out from the warm studies into the night air. The new earth-closets adopted in most of the masters' houses at Winchester are in every respect admirable. We noted also considerable improvement in the accommodation for washing; in addition to the washing-basins in the dormitories, nearly every house has two or more bath-rooms, where each boy gets a warm bath at stated intervals, lavatories where boys can wash before meals and after play, and swimming-baths are now provided at most of those schools which have not river accommodation. Those who remember the scanty and finger-freezing ablutions that were formerly slurred over on cold winter mornings will be glad to hear that warm water is no longer a luxury only attainable by the senior boys, but that each boy can now get every morning a sufficient supply, and indeed in most houses hot-water pipes are laid on every floor. We were also glad to see that most schools have adopted the plan of having a laundry on the school premises. This is an extremely wise precaution, for there can be little doubt that infectious diseases have been frequently introduced by means of the clothes washed by a town washerwoman, and brought back to the school after exposure to some source of contagion either in the washerwoman's own family or in the clothes of some of her other customers. There is one objectionable feature, however, we met with in nearly all the bath-rooms, lavatories, and laundries we inspected—viz., the waste-pipes passed directly into the drains; nor could we always get an assurance that even a trap was interposed before the pipe entered the drain. This certainly is very wrong. There is very little use in adopting improved methods of ventilation, enlarging dormitories, &c., if the sewer-gas of town is permitted freely to enter the dwellings. At most of the towns we visited we found the sewers practically unventilated, and that these waste-pipes were simply doing inside the house what ought to have been done outside. In all cases the waste-pipes of cisterns, sinks, lavatory basins, &c., ought to be disconnected from the sewer, and no reliance placed on ordinary traps, which often fail when most required; they should be conducted to a point outside the building, and discharged into a drain, which might be kept separate from the sewer, or if permitted to enter it, should be carefully trapped. In some, but in very few, houses are these precautions taken, and we are glad to point out Mr. C. T. Arnold's house at Rugby as a favourable exception to the general shortcoming on this point.

At the different schools the arrangements of dormitories and studies vary considerably. At Eton and Harrow the system is to have the study and dormitory combined. At Eton each boy has a room, except in the case of brothers; at Harrow there are usually two boys to a room, sometimes three. Each room is well furnished, of sufficient cubic capacity, and provided with a fireplace. In these rooms the work is prepared, and they are also used as sleeping-rooms. At Winchester the work is prepared in the school and class rooms, and the boys are provided with sitting-rooms at the masters' boarding-houses; the sleeping accommodation is quite distinct, dormitories being provided which usually accommodate from ten to fourteen boys. At Marlborough the same system, with some modification, is carried out, but the dormitories there, as a rule, are considerably larger; in the new boarding-houses of the school, however, the number of beds in each room more nearly approximates to the Winchester standard, and separate studies for the use of the senior boys are being gradually introduced. At Rugby the dormitories are distinct from the studies; each dormitory holds on an average fourteen to sixteen beds; a separate study is provided for each senior boy, one study sufficing for two juniors. We have endeavoured to obtain an expression of opinion from the various masters with respect to these different arrangements, but they were not unanimous in their views. We think, however, that the study and dormitory combined is wrong in principle, and, unless conducted as it is at Eton and Harrow, would lead to great sanitary, and perhaps moral, evils. At Eton and Harrow expense is usually no object, and a sufficient staff of servants can be maintained to keep these rooms sweet and clean, and to keep up the innumerable fires that are required. Moreover such an arrangement necessitates greater supervision from the masters, and there is more chance of vicious habits being acquired and passing undetected than in the publicity of larger rooms, which acts often as an effectual check on such offences. At the same time we are not favourable to the system of large dormitories, the danger there being that if scarlet fever be introduced into the school there is greater chance of its spreading among boys susceptible to its influence. The plan we would recommend is the adoption of medium-sized dormitories, containing not less than ten, or more than fourteen beds, studies for the older boys, and sitting-rooms for the younger. Some of the dormitories and studies we visited were excellent in every respect, but others were much too small, inconveniently situated, and crammed into any spare nook that could be found. We would lay it down as a rule that the cubic capacity of the dormitory should not fall below 750 cubic feet for each boy, and that the studies should not have less than 900 cubic feet given to each inmate. Each study should be provided with a fireplace; and, in addition, a fire at the bottom of the corridor along which the studies are ranged ought to be maintained during the winter months, to aid in keeping up the free circulation of air. The practice of placing studies and dormitories in roofs of houses, especially those with sloping roofs, just under the tiles, is extremely objectionable, and ought not to be permitted.

The dietary at our large schools is greatly improved, and we have heard no complaint from those most interested in the matter as to the quality or quantity of the viands, although we have heard the housekeeping at one master's house is sometimes rather better or worse than at another's, the difference depending much upon the housekeeping powers of the individual master. Usually the boys get meat twice a day; at some schools the second meat meal is breakfast, at others supper. We think the former arrangement the preferable one. A very excellent custom has been introduced into most of the boarding-houses of giving the boys hot milk or coffee with a biscuit or crust when they first rise in the morning, before going into school. Formerly—and we fear in many cases it is the custom still—boys assembled in the school-room at 6.30 or 7 A.M., and waited there fasting till 8.30. Considering that the last meal had been taken some thirteen hours previously, we think such an arrangement was anything but judicious, and in the case of young, delicate, and rapidly-growing boys must have been positively injurious. The plan of giving the boys something on first rising ought to be adopted in all schools; it is a true break-fast, and in the winter months is a good preparation before going into the cold school-room, and the more substantial meal is better digested if the exhausted stomach is previously refreshed by this preliminary "snack." Whilst on the question of diet, we would speak of the bad practice of allowing boys to spend their money on confectionery and other provisions in the town, and receiving large and frequent hampers from home. Both the masters and the medical men have spoken to us on this point, and state they have endeavoured to control the evil as much as possible; but custom in many instances has been too strong for them to effect much reform, especially as the parents and friends too often aid and abet the boys in this particular. As meat is now given twice a day, there is little excuse for purchasing extra supplies, as was the case formerly, when boys were almost obliged to get something to eke out their scanty suppers. If a boy is too dainty to eat the plain, wholesome food provided for him, he ought to be placed in the doctor's hands, and not permitted to fill his stomach at his own discretion with unwholesome and miscellaneous trash. We recognise the difficulty of dealing with this question. It would, no doubt, be unwise to place too many restrictions on the school boys; still something ought to be done, and we think the medical men of the various schools would act wisely if, in conjunction with the head masters, they would address a special note on this point to parents generally. The masters, however, ought to see for themselves that the food supplied by the shops is eatable and wholesome. We have been told gruesome tales of the provisions sold at the Eton "sock" shops, and we think a little supervision in this direction would be beneficial.

In the course of our inspection we have been struck with the great difference existing in the arrangements of the various boarding-houses in the same school. In some the sanitary and domestic arrangements were excellent, every precaution being taken to prevent the possibility of infectious disease entering and spreading, and every appliance that could

add to the health and comfort of the boys adopted; in others these matters, except in the outside show of neatness and cleanness, were quite neglected. This should not be; it is neither fair to the parents or boys that one house should be inferior to another, nor is it fair to the school interests generally that one house should be permitted to lag behind the others in matters of sanitary reform, and perchance bring disaster otherwise not merited on it. At Winchester the governing body have wisely determined to purchase the boarding-houses, and lease them to the masters; in this way uniformity of sanitary and domestic detail can be secured. This plan could not be carried out in every school, but we think the Head and other masters, together with the medical officer, should arrange to adopt a certain standard in respect to these matters, and enforce it on all the houses systematically.

Address
TO THE
GENERAL MEDICAL COUNCIL,
By DR. ACLAND, F.R.S.,
PRESIDENT.

AT the last session of the Medical Council a review of the work of the Council was made by our late President. The absence of Dr. Paget from the chair and from the Council is felt by all of us as a grave loss. There was something in the gentle wisdom of that sterling man which gave us the confidence we feel when crossing slippery paths with a sure-footed mountain guide. Only one change has taken place in the Council since we parted. Oxford sends us no stranger in one who brings from the sister University to that which Paget adorns mature experience for our common duties.

Only a third of the members of the Council who formed it in 1858 remain. Not half, therefore, know how great is the change which has come over the opinions of the medical profession since eighteen representatives of nineteen universities and corporations, all distinct, some in admitted rivalry, met six nominees of the Crown as representatives of the public at large, and proceeded to construct a sound and uniform system of medical education, general, scientific, and professional. It is well known in the Council how rapidly, though silently, the promotion of the general good superseded solicitude for particular interests, and how soon the arduous task of harmonising diversities in national sentiment, of seeking the good in every existing system, of purging the evil from every usage, however time honoured, became the aim of every member of the Council. It would ill become me to dwell on this topic, or even to have touched on it, but for the purpose of our strengthening each other's hands in the discharge of our complex duties.

The construction of the Register, the removal of offenders from it, the completion of the Pharmacopœia, the visitation of old institutions, and freely reporting on them—all, a few years since, arduous tasks in prospect—seem now to us a matter of course and a page in history. What the old universities would have thought twenty-five years ago of giving up their examination-papers to strangers without resistance it is not easy to realise. They now heartily recognise our endeavours, and aid in promoting our success.

I am far from wishing to be understood as implying that our work is nearly done. That is not my opinion. On the contrary, it would seem we have only lately made our tools, and sharpened them for their work. A glance at the subjects to which the attention of the Executive Committee has been drawn during the recess, and at the programme of business, will show this.

The Committee has had a correspondence with the Registrar-General, on his invitation, as to the working of the certificates of death under the new Act. The machinery of the Council, and your individual care and attention, enabled the President to forward a final answer, which was the result of much thought by representatives of opinion all over the country, without the labour to you of a meeting of the Council.

The Committee has had occasion to address the Home Office on the subject of legal proceedings for offences under the Medical Act. They hope that the letter sent on behalf of the Council will meet your approval.

They have also been compelled to draw the attention of the Local Government Board to Article 178 of the General Consolidated Order of the Poor-law Board, which is contrary to the spirit of the Medical Act. It excludes from certain important professional duties all surgeons not being members of the College of Surgeons of London. The Board have undertaken to reconsider the clause.

The various letters thus addressed will be laid before you.

It is within the knowledge of the Council that the Executive Committee was summoned in April last to consider the effect of two Bills, brought in by private members, for the amendment of the Medical Act.

First, the Bill of Sir John Lubbock, to enable the College of Surgeons of London to take part in the Conjoint Scheme of Examination in England, was to be opposed by Mr. Stansfeld, in order, if we are to believe report, to make it compulsory on that College, or on the Conjoint Scheme, to admit women to their examinations. Whatever may be the merits of this real or supposed act of justice to women, it could not receive your sanction or approval, that a Conjoint Scheme—an admitted good for England—should be impossible, except under a condition to which many entertain the strongest objection.

His Grace the President of the Council, having received the Executive Committee, clearly appreciated the force and the fairness of this view, and promised the fullest attention of the Government.

The second Bill, that of Mr. Cowper Temple, to compel the Council to register degrees granted to women by certain foreign Universities, was open to still graver objection on grounds of public policy. The effect of this Bill would be fatal to two principles of the Medical Act of 1858. That Act makes the Medical Council responsible for the courses of study and examination undergone by all persons placed on the Register. It is clear they could not, without much diplomatic negotiation and great expense of visitations, if at all, be responsible for foreign degrees; and, secondly, it would be impossible to refuse to men so dangerous a privilege if it were accorded to women. His Grace the President of the Privy Council, and Lord Sandon, the Vice-President, considered with courtesy and prolonged attention this subject also. They undertook to lay the matter before the Cabinet. They further assured your Committee that no steps would be taken in respect of medical legislation except after the fullest communication with the Medical Council.

To the subject of these Bills we shall have to return.

Since we parted, medical and surgical examinations in the Universities of Oxford, Cambridge, Durham, Edinburgh, Aberdeen, St. Andrews, Dublin, and examinations in the College of Physicians and College of Surgeons in London, and the College of Physicians, the College of Surgeons, and the Society of Apothecaries in Dublin, have been visited. The reports on them have, for the most part, been already circulated among you, and will all shortly be laid on the table. We have to thank the visitors, both those of the Council and those appointed by the Council, for their cordial co-operation. When all the arrangements are complete the matter seems simple enough, but the Council owes a debt of gratitude to Dr. Quain and Dr. Bennett, for the pains they have bestowed on the work assigned by you to the Executive Committee.

It has been truly said that the Medical Council is limited in its powers. It is no doubt bound, and happily, within the four corners of the Medical Act. Nevertheless, the functions which have to be discharged by the Council are wide enough, as the various subjects already enumerated show, heavily to tax our time and attention. Yet these subjects imperfectly represent what is still before us. When I said just now that we had been much employed in making tools, implying that much work had still to be done, I had in my mind many other things which will come before the

Council, as year by year it considers what it is the public want from the medical profession, and lays down the conditions under which the profession can fulfil the just expectations of cultivated men. We have only to take three instances from progressive subjects before Parliament—the duties of officers of health, the qualifications of analysts, the medical duties of women.

It may be reckoned as certain that the eminent and experienced persons who from all the seats of medical study come to sit round this Council-table, will sooner or later have to consider the due qualification of all these persons, under their several heads. For, first, as to the highest sanitary officers; are they to be all on the Register, all debarred from practice, all equally experts? and, if so, how educated, examined, and certificated? Secondly, are analysts, who are to arbitrate in doubtful cases of chemical analysis, to adjudicate without appeal on what is and what is not injurious to health?—a subject on which we have certainly much yet to learn in this country; or are they to judge only of the purely chemical question of adulteration? Thirdly, are midwives to be licensed? if so, by whom, how educated, how examined, how certified?

The Council will not fail to remember that these questions have been the subjects of special reports by committees of the Council. The report on Public Health, 1869, the report on the Medical Education of Women, 1873, and the report with reference to Public Analysts, 1874, show that the Council is not unprepared whenever public opinion or Government inquiry calls upon it for advice.

Such reports, however, and such visitations are but the framework, or mould, or machinery by which our work is to be proved. They are not the work. When once the public is satisfied that the preliminary and most obvious end has been gained, of securing perfectly righteous examination, then, indeed, two difficult problems still remain—how to secure good teaching, and what to teach.

Unjust, indeed, would it be to say that the question of teaching, as far as professional subjects are concerned, has not been handled. The report of 1869 on professional education, condensing the reflections of no less than 131 teachers of experience, has laid down certain definite principles from which few bodies dissent, and, on the whole, few schools depart. The consequence is that teaching, though not perhaps uniform throughout the country, is without doubt greatly improved, and the results attained most encouraging. For many deficiencies that captious critics might point out, for usages prior to 1858, and for the transitional character of the age we live in, neither the medical profession nor the Medical Council is responsible. The State has endowed no medical schools, and but very few medical teachers. It has maintained no medical colleges. All has been done by voluntary and unconnected effort. Hence our freedom and our success, but also the cause of our failings.

When, however, the testing machinery, for which the Council is responsible, is in perfect order, there will be much need of sober thought as to the period, quality, plans, and extent of literary, scientific, and professional instruction to be absolutely required of all youths destined for the medical profession. Not seldom is there a tendency to require too much of youth. We see clearly what is needed in the profession as a whole; we ought not to expect that whole to be found in every unit of it. The method of optional subjects is becoming urgent. In the optional subjects limitation of range is every year more necessary, although we must not forget that the average children of modern educated races acquire the higher knowledge more readily than the children of the past.

When the Council, now sixteen years ago, decided to leave the education in arts to the national educating institutions—i. e., mainly the universities,—it did so in the conviction that they would represent the full experience and wisdom of the age. Yet opinion is by no means settled, even in the universities, as to the basis on which the scientific mind should be moulded. Neither the opponents nor the disciples of Bentham, Mill, Darwin, or Herbert Spencer have said their last word on the whole theory of human existence and human aims. When men are divided on the fundamental conception of humanity, they will not be agreed on the objects of practical life in the world. And yet we here have to fit men for some of the most practical, most necessary, most human, most beneficent work, for every climate, for every race,—as well for the millions of all castes in India and the protected negroes of Africa, as for our own poor, our own nobles, and our toilers and defenders by sea and by land. While educational theories are being discussed, we have to act.

I have touched upon these topics, however slightly, because a motion will be brought before you referring to the whole of the Reports upon Education; and because the Council has from the first emphatically laid stress on the supreme importance of general education, has delegated in full confidence to the national educational bodies the charge of that education, and has maintained its right to inquire into the mode in which that education is carried on.

It were not to be desired that we should, with all our other duties, be needlessly entangled in this thorny path; but once the professional examinations arranged, their extent and their method happily agreed upon in the three branches of the kingdom, this fundamental work may not be forgotten. The general, nay the scientific education of the lower and the middle classes is making enormous strides. For the sake of our successors in our profession, we must not use the standard of our younger days as the touchstone for their attainments in general culture; not if we mean them to keep their place in the brotherhood of true and thoughtful men.

The withdrawal of Lord Ripon's Bill in 1870, however necessary that withdrawal was, under circumstances which accidentally complicated it, has no doubt delayed the consideration of several important subjects. Perhaps no real harm has ensued. Time is an element in all healthy growth. The progress which has been made since the Reports to the Council on Professional Study in 1869 is shown by the report of 1873 to have been great indeed. The papers which will be laid before you, together with your own opinions, as expressed up to last year (1874), and the Reports of your Committees on Education in 1869, 1870, 1871, 1872, may be brought by a committee into a condition for your full discussion, and indeed form a very complete statement as to the present condition of the attainments of the medical students in this country. Nor, I am convinced, need you shrink from the survey. I wish I could say that I am as convinced that the energy, knowledge, high character and opportunities of our staff of teachers were arranged with the least loss to the students or waste of power to the teachers. The observations of the Teachers' Association in Appendix II. of the Report of 1869, will partly illustrate this.

I return now, as I promised, to the subject of two Bills at present before Parliament—viz., Sir John Lubbock's and Mr. Cowper Temple's Bills. It was important that you should meet in time to express an opinion, should you desire it, on these Bills. These Bills touch the very eye of the Medical Act.

Sir John's Bill, if passed, will make at length possible the combination of all the licensing bodies in England. There may then be one pass examination uniform for all England. If defeated, it would be defeated, so report says, because it does not enter into the question of the registration of women, which it leaves unaltered. Your Executive Committee had reason to hope that the Government would not permit so important a measure to fall on a collateral issue. I am happy to say that the Bill passed through Committee on Tuesday night last, the Vice-President of the Privy Council having satisfied Mr. Stansfeld with respect to the intentions and effects of the Bill.

The effects of Mr. Cowper Temple's Bill have been already described. A letter bearing upon it, written by direction of the Lord President of the Privy Council, will be laid before you. His Grace requests that at this meeting of the Council the Bill shall be brought under consideration, and that the Council will make to him their observations upon it. He is of opinion that Mr. Cowper Temple's Bill, though limited in its direct scope, can hardly fail to raise in Parliament the general question whether women ought to be able to look to medical practice, or certain branches of it, as open to them equally with men as a profession and means of livelihood; and, as Government may have to express an opinion on this general question—with regard, on the one hand, to women who desire to obtain legal status as medical practitioners in this country, and, on the other hand, to the examination, rules, or other conditions which prevent them from accomplishing their wish,—he desires that our observations should

not be restricted to the particular proposal of Mr. Cowper Temple's Bill, but should discuss as fully as you may see fit the object to which that proposal would contribute.

One more topic—that of the public health—must be noticed. On no question of first-class social importance has the public mind changed more in the memory of most of us than on this. The prevention of diseases as a subject of common national interest, strange as it now may seem to us, is but of comparatively recent growth, except as regards our prisons, our armies, and our fleets. Foresight would have prevented evils which have grown up unnoticed, both in our villages and in our towns, and are now causing great labour in the removal, as well as greater trouble in the prevention in future. The prevention of disease has become a great branch of our profession. The Universities have taken the matter up as well as the profession and the public at large. Education, certificates of qualification to practise, and diplomas already exist in Dublin, Edinburgh, London, and Cambridge, and are in preparation at Oxford. I forbear to dwell on this topic any further than to say that it may be a question whether the Council should ask for power to regulate this education and enter these diplomas or certificates on the Register. The desirability of conjoint boards of examination in this branch of knowledge may also demand consideration.

And now I have performed, as simply as I am able, the honourable task which you have in your goodness imposed on me, of opening a new session of the Medical Council. I ask of you that which you will certainly grant, your support, as I endeavour to second your efforts. Our hope is, by the agency of ancient and progressive institutions, to make medical education uniformly adequate through the whole kingdom; to bring former experience into harmony with the lessons of true culture and modern science; and to provide, as far as human agency can provide, a constant supply of persons qualified to promote the individual and the public health in a nation, whose destiny calls her children to every form of human labour, in all climates, and every condition of human life.

THE COMPARATIVE ANATOMY OF THE PLACENTA.

BY PROFESSOR TURNER.

THREE lectures have been delivered during the present week (June 14th, 15th, and 16th), in the theatre of the Royal College of Surgeons, by Professor Turner.

In the first lecture the learned professor stated that he had intended to give an account of the placenta in the various classes of mammals, but had been compelled to restrict himself to certain particulars only on account of the impossibility of compressing the numerous details that were known in the short space of three lectures.

The placenta, he proceeded to state, is a compound organ, consisting of a maternal and a fœtal portion, and he considered it expedient to commence with an account of the fœtal part. The essential portion of this was the chorion, and it was necessary to distinguish between the primitive and the secondary or persistent chorion, which were very different structures. A drawing of the primitive chorion of the rabbit was referred to, and it was shown that it at first consisted only of the zona pellucida with projections or villi on its surface. Beneath this was subsequently formed the subzonal membrane, corresponding to the serous layer of anatomists. This subzonal membrane is an epithelial structure derived from and continuous with the epiblast of the embryo. Internally the epithelial layer is in relation at first with the amnion, and subsequently with the allantois. The bloodvessels of the subzonal layer are derived from the vessels of the fœtus, chiefly from the vessels of the allantois, but in part also from those of the umbilical vesicle, in some animals at least. In ruminants, cetacea, pachydermata, the scaly anteater, and some others the sac of the allantois is persistent. In man, the apes, rodents, and bats it almost entirely disappears, and the chorion comes to consist of two layers—an outer epithelial layer derived from the epiblast, and a vascular layer from the allantois. In sheep and other ruminants with bifurcate uterus, and in Orca gladiator the chorion extends into both horns of the uterus, though the fœtus is only contained in one horn; whilst in the pig, in which there are several fœtuses, the chorion is limited in extent.

The surface of the chorion is villous, and the arrangement of the villi differs in different instances, being sometimes *generally diffused*, as in the mare, cetacea, scaly anteater, tapir, hippopotamus, and rhinoceros. As an example of this form, the chorion of the mare was taken. It was pointed out that there was a tendency to the formation of bald patches; one, for instance, well marked, being situated opposite the os uteri, where, of course, there was no mucous membrane for the villi to penetrate. Rolleston showed the same peculiarity in the chorion of Orca gladiator—a Cetacean—opposite the extremity of the uterine horn—i.e., opposite the Fallopian tube; and Turner had himself observed that there was a similar bald patch in Orca opposite the os uteri. In like manner Sharpey showed that in the scaly anteater an elongated bald patch ran from one pole to the other of the chorion. John Anderson observed similar bald spots in the tapir.

The peculiarities of the pig, which is usually regarded as a diffused placenta, were then dwelt upon. V. Baer, however, long ago pointed out that a considerable portion was bare, which proved on examination to be an elongated allantoic sac. The chorion of the pig further shows a mottling caused by the presence of feebly vascular and non-vascular areas.

In regard to the cow, large tracts exist on which no villi exist, whilst they are elsewhere accumulated in large numbers; and the placenta is said to be *tufted*, or to present fœtal *cotyledons*. Such a cotyledonary arrangement is well shown in the chorion of a giraffe in the museum of the College put up by Prof. Owen. This form of placenta is not present in the camel nor in the tragulida.

In carnivorous animals, in seals, in the hare, and others, the villi are accumulated into a zone-like band running round the middle of the chorion, and the placenta is said to be zonular. It is zonular in hyrax, and also in the elephant, but the elephant has two patches of diffused villi at the poles of the chorion.

A peculiar arrangement of the villi has been shown to exist by M. A. Milne-Edwards in the scaly anteaters and in lemurs, and by Prof. Turner in the sloth. Here the villi cover the whole of one end and the middle of the chorion, but leave the opposite pole bare. The placenta is therefore bell-shaped.

The last form of placenta is the *discoid*, in which the whole chorion is destitute of villi, except a single area. This form is met with in rodents, bats, and insectivora, and in man.

Having thus considered the distribution of the villi, Prof. Turner proceeded to consider their shape, which presents great variety, sometimes being mere projections, sometimes more compound, and sometimes arborescent. The peculiar ridges giving off villi found in the pig, which almost but do not quite meet in the white spots, giving the surface a mottled aspect, were particularly dwelt upon. In the mare the villi are filiform; in the sheep and cow they are longer and branched; in the cat, leaf or plate-like; whilst in the seals and in man they are very much subdivided.

Then, in regard to the structure of the villi, Prof. Turner referred back to their origin, and showed that, like the chorion itself, they consisted of an epithelial and a vascular layer. From his own observation he had been led to distinguish in man and cetacea two series of capillaries—an intravillous and an extravillous layer, though these were continuous with each other. With this he finished his account of the fœtal part of the placenta.

He then proceeded to describe the structure of the mucous membrane of the unimpregnated uterus, which differs much in different animals. In man it is smooth, but in animals it is usually folded either transversely or longitudinally. In man it is extremely thin, but is elsewhere very thick, and in the case of the great kangaroo which Prof. Turner had recently the opportunity of examining in the Zoological

Society's Gardens, it appeared to reach its maximum, the mucous membrane being no less than three times thicker than the muscular wall of the uterus. The mucous membrane is in all mammalia lined by the same kind of epithelium, and this is columnar and ciliated. The subepithelial layer varies much in thickness, but is characterised by its extraordinary richness in round and fusiform cell elements, which doubtless play an important part in the process of growth.

The Professor described very fully the glands, which are tubular, more or less oblique in direction, and more or less branched. In the mare, pig, dog, and hedgehog they are closely arranged, whilst in the sloth, macacus, and chimpanzee they are very sparsely scattered. The glands are lined with a continuation of the epithelium covering the general surface of the mucous membrane. Leydig first demonstrated that they were columnar and ciliate in the pig, but this has since been shown to be the case in the cow, sheep, mouse, and bat.

In regard to the course of the glands, Sharpey, from observations made on the bitch, thought there were shorter unbranched and longer branched ones, and this was supported by Bischoff, who concluded that the shorter ones secreted mucus and the larger ones a special fluid. Prof. Turner's own observations, made with higher microscopic powers than were used either by Sharpey or by Bischoff, is of opinion that there is no difference between them, the shorter ones being artificially produced by the section, in consequence of the longer ones not running straight, but at an angle. The drawing of the glands usually contained in text-books, taken from Weber, is conventional, and Prof. Turner generally agrees with the account given by Dr. J. Williams in a recent paper.

SANITARY NOTES AND REPORTS.

MR. GEORGE TURNER, medical officer of health for the borough of Portsmouth, has recently submitted a report to the Urban Sanitary Authority of that town, containing some interesting particulars. He commences by comparing the death-rate with and without the deduction for soldiers and sailors, items that have always been considered to increase the total mortality in the town to a great extent. It does not appear, however, from the statistical result, that this inference is correct. It is more probable that the dockyard work, which gives steady remunerative employment to 5500 of the better class of artisans, has a directly beneficial effect on a large portion of the community, and so reduces the mortality. In recapitulating local facts and circumstances relating to zymotic diseases, Mr. Turner appears to have received a very adequate amount of assistance from the medical men attached to the Poor-law districts and from the School Board authorities, so that he has "frequently prevented children residing in the same house as a child suffering from measles or scarlatina from attending the schools, and thus spreading the disease"; but he at the same time records the difficulties universally met with by all health officers in their endeavours to arrest the progress of scarlatina. An epidemic of this disease attacked the children of the soldiers in Eastney Barracks, but a special hospital was provided; the epidemic was thus circumscribed, but fifty-eight cases occurred, and of these thirteen proved fatal. The old story is told, and told very emphatically, as to the water-supply, and the writer says, "I have never examined a single example of well-water obtained within the town which was fit for drinking purposes." Abundant proofs are given in the chapter on Drainage Nuisances, &c., that the sewers are insufficiently ventilated. The street ventilators are inveighed against, and no wonder, for in London, Brighton, and other places, as well as Portsmouth, there is no doubt that they are a most abominable nuisance, and, if pipe ventilators are supplied in sufficient quantity, entirely avoidable. Hence we do not agree with Mr. Turner that frequent openings *in the streets* for ventilation are necessary to prevent the escape of sewer-gas into houses. The reminders that minute corrosions of leaden pipes may occur, leading to an escape of sewer-gas, that pipes from sinks should be made to terminate over a grated gully, properly trapped and situated outside the house, and that great evils arise from wall-papers containing arsenic, are all practical, and though not novel, very much to the point. There is room for improvement in the style and diction of the report; but the recommendations and warnings given are very clearly defined, and must commend themselves to the attention of his committee. The report is supplemented with monthly, quarterly, and annual death-rates, and a climatic chart in connexion therewith, and also a summary of work done by Mr. Henry Sherrington, the sanitary inspector of the borough.

The Tottenham Sanitary Association, a young but energetic body of sanitarians established two years ago, has published an interesting and valuable statement of the death-rate in Tottenham from 1838 to 1874 inclusive, drawn up very ably by Mr. Lewin Hill, with the aid of documents placed at his disposal by the Registrar-General. The statement shows that (Tottenham being formerly classed as a decidedly healthy place) notwithstanding the increase of population between 1850 and 1860, the health of the parish improved under the vigorous measures adopted by the then newly created Board of Health to provide drainage and a proper water-supply, but the salubrity of the place has diminished since the population (which has of late years increased rapidly) was allowed to outgrow the sanitary arrangements suitable to an earlier period. The statistics show further that the ventilation of existing sewers, the construction of additional sewers, the purification of streams and ditches, and the exclusion of landspring water from the water-supply (all improvements carried out since the outbreak of typhoid in the spring of 1873), have produced an immediate diminution in the death-rate, and a marked decrease in the mortality from zymotic disease. It would be well if the Association could go a step further, and tell us how far the sickness from zymotic disease has been influenced. Meanwhile we commend this very practical "statement" to the attention of sanitary authorities. The report recites that "the object of the Association is to watch over the sanitary interests of the parish, and to diffuse sound information on all matters connected therewith." Ratepayers in urban and rural districts might do worse than follow the example of the Tottenham Sanitary Association.

Since these remarks were in type we have received a report from Dr. Tyndall Watson, medical officer of health for Tottenham, which indicates a very bad condition of surface wells. By a reference to THE LANCET of Oct. 20th, 1866, it will be found that Dr. Seaton, having been directed by the Privy Council to inquire into the cause of an outbreak of fever and diarrhœa at Page-green, attributed it to the use of drinking-water from these wells. But the wells remain, the water is drunk, and enteric fever is constantly the result.

The elaborate report of the medical officer of the Swansea Rural Sanitary Authority contains an immense amount of useful information. The labour in preparing it must have been prodigious. It commences with three tables showing the causes of death in the district, at different ages, during the years 1872—4. Then follow twelve tables with a record of the daily mortality in the year 1874; and then we have two large diagrams giving a daily record of deaths, with the meteorological conditions for the same year. Dr. Rogers has done good service in preparing these diagrams. As yet our knowledge in this respect is too limited to draw any definite conclusions as to the effect of atmospheric conditions on health, but we know enough to indicate the importance of making such records, and we have no doubt that when we have accumulated a sufficiency of facts some general law will be deduced that may enable us to counteract injurious meteorological influences.

WEST LONDON HOSPITAL.—The anniversary festival in aid of the funds of the West London Hospital, Hammersmith-road, was held on Tuesday evening at Willis's Rooms, King-street, St. James's, under the presidency of the Duke of Wellington, K.G., Lord-Lieutenant of the County of Middlesex. Before the proceedings terminated, Mr. Alexander (secretary) announced that subscriptions amounting to over £500 had been promised.

THE LANCET.

LONDON: SATURDAY, JUNE 19, 1875.

THE epidemic of measles in 1845 in the Faroe Islands has long been the customary illustration of the effects of the disease when introduced among a population which had for many years been free from it, but, unhappily, it is no longer an isolated instance. Several other examples have recently occurred of the same effects, upon a larger scale, and with no less distinctness; the latest of which has the terrible proportions of the epidemic in Fiji, to which we briefly referred last week. Although it may reasonably be hoped that the mortality there is overstated, whatever deduction may be made for exaggeration, the loss of life will probably remain a frightful illustration of some of the more profound and saddening relations of disease.

During the last two years a remarkable epidemic of measles has passed through the southern half of the globe; and in several countries which had before been entirely, or for a long time, free from the disease, its effects have been very severe, and its tendency to attack unprotected adults almost as readily as children has been very marked. In the latter part of 1873 the disease was introduced into the Mauritius, probably from South Africa, where, as an isolated epidemic, it existed during the previous year. In Mauritius it had been long unknown, and it rapidly spread to every part of the island. During the last quarter of 1873 and first quarter of 1874 it caused more than 2000 deaths. The Indian and the general population suffered in about equal proportions. In Port Louis, in three months, 9 per 1000 of the inhabitants died from the disease; so that the number attacked must have been very large. Persons of all ages suffered, even up to advanced periods of life, and the number of adults attacked was very considerable. The greatest mortality was among children, so that the frequency with which adults suffered does not appear in the mortality records; but 33 per 1000 of the deaths are given as of persons over five years, and 10 per cent. of the deaths were of adults. In the summer of last year the disease gained a footing in South Australia, where a general epidemic had been unknown for nearly a generation. It spread rapidly among the population both of Adelaide and the surrounding districts. Adults suffered in large numbers. Later in the year it spread to Victoria and New South Wales, where, during the last hot season, its ravages have been severe, and an epidemic of scarlet fever has accompanied it. From Australia it seems to have passed, directly or indirectly, to Fiji, where its results have been so terrible.

To what are we to attribute the severity which the disease manifests under such conditions? Does the great mortality, when the malady effects a footing on what is to it "a virgin soil," indicate any greater virulence than it manifests in its action among a population in which it is a familiar visitant? It has been suggested that it is so; and that explanation was offered by Lord CARNARVON in his account of the Fijian epidemic in the House of Lords. It is said that nations as well as individuals are prone to have diseases for the first time, or after a long period of immunity, with unusual severity; while, on the other hand, some degree of tolerance is established in a community where the disease is always present, and continually modifying individual constitutional conditions, both acquired and inherited. Whether this is or is not the case, other causes are not far to seek to which the severity of the disease, in the epidemics to which we have alluded, may be in great part ascribed. The total mortality from epidemics is largely influenced by the arrangements which obtain with regard to both the sick and the healthy. By efficient sanitary measures, good drainage, and distributed population, the number of persons attacked may be kept within the narrowest practicable limits. By careful nursing and attention, the mortality of those who suffer may be as far as possible reduced. Now in the older centres of civilisation these epidemics are always present. Freedom from them, in the case of a given community, for any length of time, implies wide geographical separation from the older seats of civilised life; and in many cases the distance is more than a geographical one, and extends to the habits and sanitary state of the population. Such is the case in Fiji, and, according to the brief accounts which have reached this country of the epidemic there, the great mortality has been in large measure due to the fact that the sick were exposed to the most unfavourable conditions. Unprotected from exposure, untended, and untreated, chiefly in consequence of their own unhappy prejudices, every complication of the disease must have been invited and rendered intense. In accordance with this view, we find that those classes of the native population over whom adequate supervision could be exercised have suffered slightly. In Mauritius matters are not much better than in Fiji. The lower classes are miserably supplied with medical aid, and out of 779 deaths from measles which occurred in the first quarter of last year only 137 were medically certified. In Australia this cause of mortality no doubt does not exist, and we might have expected that the insanitary conditions favourable to the spread of an epidemic would also be absent. But this is apparently very far from being the case, and the colonial journals do not hesitate to ascribe the severity of the disease in their large towns to their defective sanitary arrangements, which appear in many cases to be in a condition of disgraceful muddle, and, whether rightly or wrongly charged with these particular consequences, are bad enough. The epidemic in Melbourne occurred during the hot season, when the water-supply is described as deficient in quantity, and liable to accidental contamination by the night-soil from the suburbs, which one contractor was in the habit of carrying to the river banks and there discharging. The city corporation uses the public parks as receptacles for the night-soil of the city, to the extreme annoyance of the surrounding inhabitants; while those who wish are able to "flush out" the contents of their cesspools with water from a certain main, the consequence of which is a liability, when the water is turned off, for the contents of the said cesspools to be forced back into the water-pipes. Such conditions, it is not necessary to say, are those most calculated to favour the production and

extension of disease on the largest scale; and we cannot be surprised at results, however disastrous, which are but the natural consequences of neglect so culpable.

THE theories that have been advanced in regard to the cause of sleep have not been very satisfactory, and most of the chapters devoted to it in our text-books are limited to a description of its phenomena: as that it is periodical; that it is usually indulged in at night; that it is sometimes accompanied by dreams; and other equally valuable statements. It must be admitted that the subject presents considerable difficulties, though, perhaps, Professor STEWART spoke a little *ultra crepidam*, or was alluding to his own, when he pronounced the investigation beyond the reach of human faculties. The observations of DURHAM have effectually done away with the view of HALLER, HARTLEY, and many of the older physiologists that it was due to pressure of the blood upon the brain; since he has shown that the brain is, practically, during sleep in a state of anæmia. But this does not get rid of the whole difficulty, since it may be asked what is the cause of the periodic contraction of the vessels, and to this no answer has been given. A paper on the subject has just appeared in PFLÜGER'S *Archiv*, from the pen of PFLÜGER himself, in which he endeavours to explain the phenomena on chemical grounds.

The functional activity of any organ, he maintains, is caused by the disintegration of living material, which consists essentially of modified albumen; and the excitability of all organs, but especially of the central nervous system, is dependent on the presence of intra-molecular oxygen. When this is used up, and has been replaced by carbonic acid, all activity ceases. The intra-molecular conditions accompanying the formation of carbonic acid are such that the atoms of its molecules at the moment of its production are in a state of the most violent oscillation, just as in an explosion; and these intra-molecular explosions, which are continually taking place throughout life, excite vibrations in all the atoms around. He compares this process with that which takes place in singing flames; and, referring to the grey substance of the brain, remarks that, in the waking condition, the vibrations are the most powerful, the singing of the flame the loudest. Experiments made with frogs long deprived of oxygen have shown that as soon as the formation of carbonic acid is arrested, in consequence of the consumption of all the molecular oxygen, apparent death is established, preceded by a period of drowsiness. The clock of life has, so to speak, run down—an expression that is incorrectly applied to death; for death is the destruction of the machine, whereas here, winding up or a fresh supply of oxygen is alone needed to set the apparatus going, even after the lapse of many hours. PFLÜGER, therefore, holds that the presence of a certain quantity of intra-molecular oxygen is absolutely necessary for the maintenance of the waking state, since this determines the number of explosions; and he regards the conditions of apparent death and sleep as parallel to each other. All physiological facts indicate that the grey substance of the brain is very unstable, and that more active chemical processes take place in it than in any other part of the body. No other organ requires so free a supply of oxygen, its activity being much sooner lost with deprivation of oxygen than the spinal cord or medulla oblongata; whilst disintegrating processes will take place in it, indicated by the formation of acid, even at a temperature of 32° F.

But the nervous system, with the associated muscular and glandular organs of the body, form a continuous network of living molecules variously combined with one another by the play of chemical affinities, and of which some are in the act of dissociation; explosions, taking place in any part, radiate along the lines of the network in all directions, and promote such dissociation, causing of course a certain consumption of force. This is especially the case with the grey substance of the brain, the energetic vibrations of which radiate out far and wide during the waking state, and thus augment the consumption of chemical potential energy in all parts of the nervous system and its annexes. The molecular changes in the grey substance are, however, attended by a consumption of oxygen which is greater than the living molecules can take up in the same time, and the amount of carbonic acid produced must necessarily diminish. The explosions become less numerous, and a condition that more or less approximates to apparent death is established. The brain, no longer maintained in activity by the forces set free in the formation of the carbonic acid, if external excitations be withdrawn, sleeps; and, in conformity with this, the work in all parts of the system diminishes.

The long duration of sleep, when the brain has apparently had time to recover its supplies of molecular oxygen, is a difficulty on this theory; but PFLÜGER meets it by contending that the intra-molecular vibrations of the cerebral substance, like the strings of a harp, continue to vibrate long after the blow which has set them in motion, which is certainly borne out by the difficulty with which sleep is obtained after severe mental exertion. By degrees, however, the oxygen gradually accumulates in the brain as in other parts, the explosions accompanying the formation of carbonic acid become more frequent and energetic, and waking results; and this may perhaps be assisted by the excitations which are constantly acting upon the skin, ear, and eye, and are conveyed to the brain, where their cumulative action results in the act of awakening. The reason that impressions made upon the periphery of the nervous system of the sleeper are not perceived is that vibrations excited from without are feebly transmitted by the exhausted nerves; whilst, in consequence of the diminution in the total heat produced in the interior of the brain by chemical processes, the cohesion of the cerebral molecules is augmented, so that impulses are inoperative which are distinctly perceived in the living state. Sleep or the waking state, then, depends primarily, not upon the amount of potential energy in the brain, but on the amount of the *vis viva* of the intra-molecular movement.

A LARGE and influential meeting was held on the 10th inst., at the Mansion House, to consider the best means of applying the principle of the Cambridge University extension scheme to London. Mr. J. STUART, the honorary secretary of the Cambridge Syndicate, first detailed the circumstances that induced the University to appoint a syndicate to take up this scheme of wider usefulness. "If people could not come to the University, the University

ought to go to them." They therefore had appointed lecturers who visited the chief northern and midland towns and gave weekly lectures on subjects, and at hours and fees, suitable to the various classes of society. For instance, three lecturers were appointed to visit Derby, Nottingham, and Leicester—one on Political Economy, one on English History, and one on Physical Geography. These lecturers visited each town once in each week, so that during the same term three courses of lectures were going on. Next term these lecturers were removed to another set of towns, and were succeeded by three others who lectured on different subjects. Each lecture was strictly educational, and questions were set which those who liked might answer in writing, the lecturer correcting the papers and answering any difficulties that might arise. The lectures are supported by a guarantee fund subscribed by working men and others; at Liverpool the guarantee fund subscribed amounts to £2500 a year for three years. The meeting passed a resolution that the scheme should be applied to London; and the Universities of Oxford and London, together with the chief educational institutions of the metropolis, are to be asked to co-operate in assisting the movement. A committee also was appointed for the purpose of carrying the scheme into operation.

There can be no doubt that a well-organised scheme for affording opportunities of a higher and systematic education will be a great boon to the artisans of the metropolis. Hitherto no such opportunities have been given them. The Working Men's College has not been able to supply their requirements; this has chiefly been owing to the amateur character of the lectures, the irregularity with which they are delivered, and, above all, to the want of a strictly educational method. The evening classes at King's and University Colleges may have reached a few, but the fees charged have practically excluded the many. What our artisans want is a definite and systematic course of instruction laid down on a thoroughly sound basis, with opportunities afforded of testing the soundness of the work done, and of the conclusions drawn from it. It is not only to supply them with information, but to teach them the right method of acquiring learning, and using the knowledge when acquired so as to produce the best results for themselves and others, that the proposed scheme will prove useful. If our artisans were taught to examine rigidly and logically for themselves the various questions of the day by a strictly inductive method, the teachers of a false Political Economy would have little power to persuade them to unseasonable strikes. If exact students of Constitutional History, they would scarcely listen to the oratory and false deductions of Dr. KENEALY. An acquaintance with Logic would enable them to appreciate the weight and value of evidence, and would free them from the nightmare of a Tichborne delusion. Whilst the first principles of Physiology would enable them to expose and ridicule the blatant nonsense talked by the opponents of the Contagious Diseases Acts. "A little knowledge is a dangerous thing." The greatest foes to society have been clever but ill-trained men; for while their intellects have attracted, their false reasoning has deceived many, and led them on to acts which were not only injurious to themselves but to the community at large. But "knowledge is power" when exact, complete, and used for proper ends; and in the extension of a sound system of education to all classes of our population we look for the maintenance of national wealth and honour.

ON the 16th inst. the House of Commons agreed to a motion of Mr. COOPER for the appointment of a Select Committee to inquire into and report upon the action of the Metropolitan Asylums Board with regard to the establishment of a Fever and Small-pox Hospital at Hampstead. Mr. COOPER's original motion was to inquire into and report upon the clauses of the Metropolitan Poor Act (30 VICT., cap. 60) giving power to the managers of asylums to take, hold, and dispose of lands for the purposes of the Act. Mr. SCLATER-BOOTH took exception to the form of the motion, by which, for a local purpose, it was sought to question clauses of which the general beneficial action in the metropolis could not be doubted; but he interposed no objection to the formation of a Committee in terms already mentioned, although deprecating the policy of the House interfering in a local affair. The most curious interlude in the discussion on the subject was Mr. M'CULLAGH TORRENS's motion that the Committee moved for by Mr. COOPER should specially report whether any new general hospital for infectious diseases in the metropolis was desirable or necessary. In other words, he wished to raise the question of large *versus* small hospitals for infectious diseases, himself being in favour of the latter. Mr. M'CULLAGH TORRENS failed to observe that the main objection to the proposed hospital at Hampstead was the contiguity of the site to houses. But the proposition for smaller hospitals involves their being placed where most convenient in the midst of the population—a proposition which would be unjustifiable if there was any truth in the allegations made by the Hampstead people. But, after all, the most remarkable thing was the statement of Mr. SCLATER BOOTH that the Local Government Board had no intention to sanction the erection of a permanent hospital at Hampstead. If this be the case, whence all this Hampstead perturbation? However, the Select Committee ought to be most useful in elucidating the question of the danger or not arising from infectious-disease hospitals, whether to patients or others.

Annotations.

"Ne quid nimis."

HOSPITAL SUNDAY.

UP to the time of our going to press the results of the Hospital Sunday collection are satisfactory. For example, on Wednesday morning *The Times* reports £9000 as received at the Mansion House. Last year it was Saturday of the collection week before the receipts reached this sum. But we shall defer our comments on the matter for another week. Unlike some of our contemporaries, we made no gloomy prognostications to be justified. On the other hand, our belief in the cause did not hinder us from seeing that some harm had been done to the movement for the present year by the meeting of March. But we shall be disappointed if the result of this year's collection is not better than last year's, as last year's was better than that of the year 1873.

THE ARCTIC EXPEDITION.

WE have been informed that the men and officers proceeding on the Arctic Expedition are for the most part men of fair complexion. This is a point of some interest in an ethnological point of view. Do the fair-complexioned races bear cold better than the dark? The fair complexion and light hair are indications of what the older writers used to call a sanguineous temperament, and belong to men of good physique, strong heart, active circulation, and powerful muscles; but we should scarcely have expected such men to bear cold particularly well, for their thin skin and free capillary circulation seem rather adapted to lose than to retain heat. And though the fair complexion belongs properly to the temperate zone, and to the more northern portion of it, yet the Esquimaux, the Lapps, the Finns, the Kamschatkans, the Northern Tartars, and the Northern Indians, are all dark races, and there is a well-known historical fact which seems to point to the dark southern races as being better adapted to bear intense cold than the northern. It is given, we believe, in Alison, to the effect that of the twenty or thirty thousand men who formed the relics of the Grande Armée, and returned from the Russian expedition, nearly the whole had been drawn from the regions south of the Alps. Have any of our readers heard how Scoresby selected his crews? He had a large cube of ice in a tub; as each man presented himself he was directed to stand with bare feet on the ice, whilst particulars were taken of his age and experience. The time when distress was clearly evinced was carefully noted, and the most enduring men secured. There can be little doubt that the nervous system plays an important part in the production and maintenance of the heat of the body, and it is the large-brained races that in all probability are best able to resist the depressing action of cold. Such large brains are prevalent in the fair-complexioned men of the northern districts of these islands, many of them the descendants of the Danish and Norwegian settlers of early times, and we may thus perhaps explain their preponderance in the crews of the *Alert* and *Discovery*.

PROFESSOR LISTER IN GERMANY.

THE progress of Professor Lister through the university towns of Germany, which he is visiting chiefly, we believe, with a view to inquire into the mode in which the antiseptic treatment is carried out on the Continent, has assumed the character of a triumphal march. On his recent visit to Munich he met with a most enthusiastic reception. At a banquet given to him nearly all the Professors of the Medical Faculty of the University, and many members of the Government, Town Council, and Medical Society of Munich took part. The guest was welcomed by Professor Nussbaum in the name of the Minister, von Pfeuffer, and Professors Ziemssen, Seitz, and others were amongst the speakers. The students of the University also sent a deputation to Professor Lister, to express the esteem and high appreciation they had for the originator of the antiseptic treatment, which is carried out with excellent results at the different hospitals in Munich. From Munich he went to Leipzig, where, as is well known, the principles of antiseptic surgery have been faithfully adopted by Professor Thiersch, who, however, maintains the superiority of salicylic acid over carbolic acid. On the 8th inst. there was a "Lister-Banket" in the Schützenhause, at which some three or four hundred persons were present, including nearly all the professors, many of the medical practitioners of the town, and a large number of medical students. Thiersch proposed Prof. Lister's health in a drily humorous speech, which was couched in most complimentary terms and was loudly applauded. Professor Lister, in his reply (which was in German), took occasion to tell the Leipzigers that he had tried salicylic acid, and found it inferior to carbolic; although he would willingly have adopted it had it been better, for it was the *principle* of antiseptic surgery, and not this or that acid, that he contended for. Professor Volkmann, who had come from Halle with many of his colleagues and students, then proposed the health of Mrs. Lister and the Misses Lister, who were present in the gallery; Professor Carus gave the "University of Edinburgh"; and toast after toast followed, the proceedings lasting beyond midnight. One very novel feature was the introduction of two songs written in honour of the guest of the evening, and set to well-known students' melodies. They were sung by the whole company, and they abound in words of welcome to Professor Lister and praise of antiseptic surgery. One of them, entitled "Carbolsaüre Tingel-Tangel," is full of witty allusions to the germ theory, bacteria, and antiseptics, the special virtues of salicylic acid not being forgotten. We believe that Professor Lister intends visiting Halle and Berlin, where doubtless he will be cordially received.

THE PECULIAR PEOPLE.

WE must leave the Judges to say whether Baron Pigott or Mr. Justice Blackburn is right as to the freedom of a parent, on the grounds of a religious belief in the efficacy of prayer as a therapeutic agent, to allow his child to die without seeking for it the advice of persons reasonably believed to have medical skill. It is very doubtful, we suspect, whether there exists any statute on this subject, in the sense in which there exists a statute requiring a parent to have his child vaccinated or educated. The fact is that the duty is so plain, and exists so much in the nature of things, that the Legislature has never, we fancy, troubled itself to formulate so obvious an obligation. For all that we shall be surprised if the Judges do not agree in the view of the matter taken by Justice Blackburn. Baron Pigott's doctrine is untenable, as we argued last year, on the ground of its inhumanity, and its inconsistency with common sense, if not with common law. The frequency with which Justice Blackburn reiterated the case of "a helpless infant" that has the misfortune to have these decent but "peculiar" people for its parents is significant of the human feeling which guided his judgment. Some people seem to think that as children only are in question the Peculiar People may be left to take their own course, finishing their remarks with a sneer at medicine. Let it be remembered, however, that the wives are involved too. Last year a correspondent detailed in our columns the case of the wife of one of the Peculiar People who had a very deformed pelvis, and was in labour. The husband objected to the interference of the doctor who had been called in by some neighbours. Nothing but craniotomy could save the life of the mother. With great courage and equal humanity he acted without the consent of the husband, and saved the woman's life. Such cases as this must recur. And it is too much to expect medical men to obtrude their services unless they are thoroughly supported by the law of the land. The above case might have ended fatally notwithstanding obstetric skill, and we can imagine what would have been the abuse of medicine and its able representative. The need of medical care in children is often only a little less urgent than in the above case. But medicine is not to be cast before unappreciative parents unless the law is distinctly declared by the Judges to be against parents acting as John Robert Downes did. If the Peculiar People came to think prayer sufficient for maintaining life, without food, we should soon forcibly teach them otherwise.

Yet to withhold medicine is often tantamount to withholding food, and a yet more inhuman course. Let the law say so. If it does not we should advise medical men to leave the Peculiar People to their own courses.

HOSPITALS AND THE PUBLIC.

THE responsibilities of hospital authorities have unfortunately been brought too frequently and too prominently before public notice of late. When matters work harmoniously, and the demands of patients are adequately supplied, very little consideration is shown to the willing, hard-worked, often over-worked, house-surgeons of the great metropolitan hospitals. These gentlemen pass through six or twelve months of perhaps the most anxious and fatiguing labour to which a human being can be put, having under their actual care from thirty to sixty patients resident in the hospitals, and being liable to be called any minute of the day or night to attend to casualties often of the most trivial character, but sometimes of a serious nature. All this they do at a sacrifice of health, and even of life, without fee or remuneration, and without the slightest acknowledgments of the community. How rare is it to find anyone publicly commending the noble army of hospital house-surgeons! But let an error, however slight or unavoidable, in diagnosis or judgment be committed, and everyone, even experienced coroners, turn upon the fallen victim, who no doubt realises his position more truly than the most rabid declaimer.

It must not be imagined, however, that we think because the advice tendered at hospitals is gratuitous it should also be uncertain and capricious. The fact that the duties are voluntary increases the moral obligation of the medical attendant rather than diminishes it, and should serve to stimulate him to more than ordinary deeds. It is on this ground to be regretted that the child who was recently sent from the Great Northern Hospital on account of want of accommodation, should not at least have had its wound dressed before being sent away to another hospital. The delay in attending to the child, which it now appears was only ten or fifteen minutes, not half an hour as alleged, was unfortunate, but scarcely reprehensible. On his way to attend to the child the house-surgeon was detained by an in-patient who was suffering great agony, to relieve which frequent subcutaneous injections of morphia were necessary; but if the burns had been dressed the child might have been saved some suffering, although the ultimate issue of the case might not have been different.

SHIP SURGEONS.

A PARLIAMENTARY RETURN (the necessity for which we have often indicated) has at length appeared, that shows the names, ages, and nationalities of persons who have served in the British merchant service during the last two years as surgeons whose names do not appear in the Medical Register. The list contains a total of 224 names, no less than fifteen of these "experienced surgeons" being under twenty-one years of age, all belonging to the United Kingdom, and all, therefore, not only unregistered, but unqualified. After this simple statement of facts it will now be acknowledged by those of our readers who desire to preserve and maintain the honour and glory of the Mercantile Marine Medical Service that we have not criticised without cause the present very loose system of supervision exercised ostensibly by the Board of Trade. We are not, indeed, of those who think that a man gleans experience by paying £5 for registration; but, inasmuch as the law enacts that "no person shall hold any appointment as a passenger-surgeon or other medical officer, either in the Military or Naval Service, or in emigrant or other vessels, unless he is registered under the Act" (i.e., the Medical Act of 1858), it is plain that those charged with the administration of the law (i.e., the Board of Trade) have lamentably failed in the performance of a very responsible duty. We are informed that the qualifications of masters, mates, engineers, and other officers, are very stringently sifted; but it would appear from the return before us that the authorities at Whitehall considered anyone, from the age of nineteen upwards, competent to take medical charge of a cargo of vital material varying from 100 to 1000 souls. It is proper to record that, as we are informed, the list does not contain the names of any "experienced surgeons" who have passed the emigration medical inspectors, either in London or at the outports. These latter officers know their duty, and do it superlatively well. But by so much the more is it incumbent upon the Marine Department of the Board of Trade, hydra-headed as it now is, to provide proper supervision for the sanitary responsibilities entrusted to it, and not continue to put upon the shoulders of mercantile marine superintendents and other officers duties that they are incompetent to perform.

THE RIVERS POLLUTION BILL.

RUMOURS have been circulated for some days that Government intends to withdraw the Rivers Pollution Bill. From inquiries we have made, we are able to state pretty positively that such will be the case. From the very first the Bill has been subject to hostile criticism, and we believe it would have been impossible to carry it in its present form through the House of Commons; at the same time, if an attempt had been made to alter any of the objectionable clauses, it would have rendered it altogether nugatory. When the Bill was first submitted to public criticism, we at once characterised it as unsatisfactory, unjust, and mischievous: unsatisfactory, because it did little to remedy existing evils; unjust, because it pressed unfairly on individual interests; and mischievous, because it encouraged towns and manufacturers in a do-nothing policy. These were the chief points urged by the various deputations that subsequently waited upon Lord Salisbury; and the facts thus brought to bear upon the question confirm us more strongly in our first-expressed opinion as to the character of the Bill. We shall not regret the delay caused by the withdrawal of the Bill if it leads to a more comprehensive and matured scheme next session. What is chiefly wanted is more rigid definition in the clauses of the Bill, a greater consideration for the requirements of particular districts and trades, and a distinction drawn between the pollutions of rivers, of canals, and of watercourses, under different circumstances and conditions.

THE VOTE FOR SCIENTIFIC MEDICAL INVESTIGATIONS.

IN perhaps no other country than England would it have been possible to have originated a discussion such as that which occurred in the House of Commons on the 10th inst., on the vote for the annual expenditure of the Privy Council Department. Mr. Dillwyn moved that this vote should be reduced by £2000, the sum which, for the past four years, has been granted for scientific medical investigations. He argued that an expenditure of this kind did not properly belong to the functions of the Privy Council, or, indeed, to any department of Government whatever, and that the researches in question were strictly matters of private investigation. Whether Mr. Dillwyn and his supporters in the House accept as justifiable the expenditure on the *Challenger* expedition, with respect to the recent transit of Venus, and with respect to the Arctic expedition, we are

not prepared to say. But that, such expeditions being approved by Parliament and the people, a question should be raised of the expenditure of £2000 on matters touching so closely the welfare of the public is amazing. The House of Commons expressed its sense of the inconsistency of the motion by a majority of 138 against it, 27 nevertheless being found to vote for it. Notwithstanding this vote, a division was again called for on the same subject on the 14th inst., when the Report of Supply was under consideration. But the majority for the vote was then increased to 167, the minority against it being reduced to 18.

Lord Sandon had no difficulty in showing that the researches for which the expenditure was asked were of a nature essential to the promotion of the sanitary welfare of the population, and that there was no reasonable hope of their being undertaken in such form as was desirable by private enterprise. Indeed, he had to confess that so scanty was the grant for the purposes to which it was devoted, that it would have been insufficient had not Dr. Burdon-Sanderson, upon whom had devolved the principal share of investigation, supplemented it from his own funds.

A return, signed by Mr. Simon, and called for by Mr. Dillwyn, gives an account of the uses to which the grant has been put during the time it has been voted. These show the important work which has been done on the intimate pathology of contagion, on tubercle, on enteric fever, on sheep-pox, on cancer, &c., with some of which the profession have become acquainted through recent works, and for the remainder of which it is eagerly looking.

We are indebted to Mr. Lowe in the first instance for the grant permitting these researches to be made, and we trust before long to see it enlarged rather than diminished or set aside.

SEWAGE UTILISATION AT CROYDON.

ON Saturday, the 12th inst., Dr. Alfred Carpenter entertained most hospitably, at Beddington, near Waddon, where the Croydon sewage farm is situated, a very large party of guests, comprising most of the distinguished members of our own and other professions specially interested in and qualified to judge as to the disposal and utilisation of sewage. Dr. Carpenter records in an explanatory notice given to each visitor on the occasion that the objects for which inspection was invited were to show (1) that a sewage farm is not a swamp or marsh; (2) that it does not injure the health of a neighbourhood; (3) that it does not damage residential property, except from the ideal point of view; (4) that it turns poor land into land capable of yielding luxuriant crops; (5) that its produce is beneficial to cattle; (6) that cattle fed upon sewage produce are themselves healthy; (7) that the food produced is fit for human consumption; (8) that a large farm cannot be carried on successfully except a large capital be invested in it; (9) that the experience of sewage irrigation on the same land for fifteen years will justify the capitalist in putting capital into sewage agriculture. The farm under consideration belongs to the Croydon Local Board of Health, and is, we believe, the first of its kind established in England. It has now been in working order for about fifteen years.

The plan of irrigation adopted appears to be exceedingly simple. The crude sewage, as it comes from the town sewers, passes first through one of Latham's strainers, the extraneous matters (as rags, paper, hardened fæces, &c.) being mixed with dry straw and garden-refuse collected from the dustbins in the town, made into a compost, and partly sold to market gardeners at 2*s.* 6*d.* per yard. The sewage is at once applied to the land—i. e., in a perfectly fresh state; and the testimony was undoubted as to the absence of smell on the land. The total quantity applied varies from three to eight or ten millions of gallons. The farm consists of 500 acres, 150 to 200 being under rye-grass cultivation; 50 are meadow, and are mainly used for the purpose of cleansing storm-waters; 82 are under cultivation for market-garden purposes, and the rest are sown with mangolds or other roots or cereals. A most excellent luncheon was provided by the host, all the materials for which had been grown or bred on the farm, as well as trout *en mayonnaise*, taken from the river Wandle, into which the effluent water flows. Samples of the effluent water were also shown, and were tasted by some of the company.

The weather on Saturday was most unpropitious, and was enough to damp the energy of all but such men as Dr. Carpenter, who chose a most pleasantly practical way of assisting to settle a much-vexed but very important question. We may remind our readers that, as the farm has now been in working order for fifteen years, the advocates of the system have had ample opportunities of drawing the above deductions, and the opponents of irrigation an equally good chance of disproving them. It must be remembered, too, that Beddington is a ratepayers' and not a model farm, so that money has not been spent, as Dr. Carpenter puts it, "for æsthetical purposes."

TREATMENT OF OZÆNA.

IN the second number of the new Paris bi-monthly periodical devoted to diseases of the ear and larynx, M. Tillot discusses the subject of chronic rhinitis and its treatment. He justly says that in this respect therapeusis has not kept up with improved means of diagnosis of the condition of the whole nasal tract by means of specula and the laryngoscopic mirror. The method, however, which he pursues, and with a considerable degree of success, is simply as follows. 1st, Medication directed against the diathetic state of the patient; 2nd, free cleansing of the mucous membrane from all crusts of inspissated secretion; and 3rd, direct applications to the membrane. The third object is obtained by means of slightly astringent powders or by the administration of these substances suspended in water and used in the spray-producer. M. Tillot has used for that purpose the mineral water of St. Christan (Basses Pyrenées), which is a nearly cold, odourless, tasteless water, containing iron and copper, with some traces of iodine and arsenic. He appends several cases both of simple chronic rhinitis and of ozæna, in which the adoption of this plan has led to considerable relief, and often cure. The hint of employing the "spray-producer" is one worth bearing in mind.

A FRENCH VIEW OF GERMAN SCIENCE.

AN amusing example of the manner in which (in marked contrast with the behaviour of some of their *confrères*) many French medical writers import the national distrust of the Germans in political affairs into the domain of science is to be found in the current number of the *Revue de Thérapeutique*, in which the writer, after an allusion to the real causes of the increased mortality among the French wounded during the last war over that of their opponents, passes on to laugh at the devotion of German *savants* to minute microscopical research. The anonymous contributor points to the discovery of bacteria and micrococci in the blood of specific fevers as an example of this microscopical zeal, which, he says, led the Germans to create the etiology of "microzoitics," and to cultivate a "bactericidal" therapeutics; and then he passes on to show how all these "lucubrations of the laboratory" have been rudely dispelled by the results of experiments showing that bacteria

are the products, and not the consequences, of the morbid processes; and he avers that it is certain that "our learned *confrères* pervert the use of an instrument which has hitherto done nothing (*sic*) to advance practical medicine; more than once—e.g., as regards bacteria—it has led into error." We hardly think, however, that impartial readers are likely to be convinced of the inutility of microscopical research, or of the worthlessness of the able researches of German observers, by these sweeping assertions of an anonymous French writer.

AMMONIA TREATMENT FOR SNAKE BITES.

WE have received files of the Australian journal *Argus* for March 18th and 19th, containing an account of a meeting of the Medical Society of Victoria, held in Melbourne, to consider the intravenous method of injecting ammonia proposed by Dr. Halford. A letter from Dr. Halford was read, in which he stated that he believed the method had been useful, and that he claimed originality in injecting directly into the blood strong doses of ammonia. He gave the names of members of the profession who had assisted him in his experiments. The chairman of the meeting (Dr. Bowen) adduced many cases, showing that the snakes (and especially the tiger snake) of Australia are capable of killing animals and man, though it would appear the quantity of poison they secrete is considerably less than that of the cobra. Dr. Bowen pointed out that the results of carefully performed experiments by Prof. Halford, Dr. Neild, and Dr. Wooldridge were directly opposed to the conclusions arrived at by the Indian commission in regard to the Australian snakes. After referring to other affections in which the intravenous injection of ammonia had proved serviceable, he summed up his observations by stating—1. That the bites of the Australian poisonous snakes are extremely deadly. 2. That the symptoms are the same in Australia as in India; that they differ somewhat in animals and in man; that they are distinct in character from those of alcoholism. 3. That ammonia is the best form of stimulant to exhibit; that the intravenous injection is the best method of its administration. An interesting discussion followed the address, at the close of which a motion was put by Mr. M'Crea and carried that a sub-committee should be appointed by the Society to conduct a series of experiments independently of Prof. Halford. Mr. M'Crea stated that he did not propose this in any spirit of opposition to Dr. Halford, but simply because he considered it desirable that there should be an independent body. It is probable that these experiments will be commenced early next summer—i.e., in three or four months' time. We shall await the results with much interest.

CHARGE AGAINST A BRADFORD PHYSICIAN.

A MOUNTAIN at Bradford has been in labour, and the classical result has ensued. More than nine columns of the local newspaper are filled with a short-hand report of a meeting of the committee of the Bradford Infirmary to hear a charge preferred by the firm of Sir Titus Salt and Co. against Dr. Alexander, one of the officers of the institution. The charge was this: that a patient sent by them to the infirmary was seen by Dr. Alexander, and that this gentleman had, on his own authority, and without informing the firm of Salt and Co., transferred him from the hospital books to his private practice, and had taken fees from him for medical advice and attendance.

In doing this we certainly think that Dr. Alexander was guilty, to say the least, of a very grave indiscretion—an indiscretion which no amount of misunderstanding as to the patient's circumstances will excuse; and we think that the vote of censure passed by the committee on its officer was merited. At the most, however, the preferers of the charge, who seem to have acted in a most dictatorial manner and with unwonted acrimony, proved that Dr. Alexander, who is a man of high professional and scientific attainments, and a most valued and zealous officer of the infirmary, had been indiscreet, and we cannot too strongly blame the committee for allowing the publication of nine columns of printed matter to be scattered broadcast among people, who will only gather, from the big type, that a charge had been made against a medical man, and who will not unnaturally infer from the length of the report that the charge is far more serious than in reality is the case. Dr. Alexander will, we doubt not, act more wisely for the future, but we cannot help feeling that the punishment has been out of all proportion to the offence, and that the authorities of the hospital would have done more prudently and more justly to have considered the matter privately, instead of calling in the assistance of short-hand writers, to give undue publicity to a matter which, from every point of view, would have been better left in obscurity.

SCARLET FEVER AT KNIGHTSBRIDGE.

WE regret to state that scarlet fever has broken out among the men of the 2nd Life Guards stationed at Knightsbridge. It appears that at the end of April "the Blues" left these quarters for Windsor. Some of the children of that regiment had been ill of scarlet fever. On the same day the "Blues" left the 2nd Life Guards marched in. Scarlet fever, of course, soon appeared among the incomers, and has attacked both the men and the children. It has also spread outside the barracks in some of the lodging-houses in the neighbourhood of Sloane-street, where a few of the married men are quartered. We have frequently had occasion to point out the insanitary condition of these barracks. This is not the first time that similar outbreaks have occurred. The drainage is most defective. The children's school-room is situated quite close to a large manure-heap, exposed to all its reeking effluvium. This unwholesome building ought at once to be removed; it is not right that it should remain in the most fashionable and frequented part of town.

INTERNATIONAL CONGRESS OF MEDICAL SCIENCE.

WE beg to call the attention of our readers to the fourth session of the International Congress of Medical Sciences, to be held at Brussels, in September next, during the week commencing on the 19th of that month. According to the programme already issued, the subjects for discussion are of extreme interest, and will include questions in all the departments of medicine and surgery. There will be eight sections—namely, Medicine, Surgery, Obstetrics and Gynæcology, Biology, Public Health, Ophthalmology, Otology, and lastly Pharmacology. The discussions will be conducted in French, but foreign members will be allowed, if they wish, to express themselves in other languages. To take part in the Congress, it is necessary merely to register with the Secretary, Dr. Warlomont of Brussels. Each member will have to pay ten shillings, for which he will receive a copy of the Proceedings. This sum may be paid at the time of registering, or at the time of taking out the ticket of membership. The Committee of Management have sent letters of invitation to the various medical colleges of the United Kingdom, from which we trust there will be found large numbers ready to undertake the pleasant duty of representing British medicine and of cultivating the good opinion of our estimable continental *confrères*. All communications relative to the Congress should be addressed to Dr. Warlomont.

IRISH MEDICAL ASSOCIATION.

THE annual meeting was held on the 7th inst. at the College of Surgeons, Dublin, the chair being occupied by the President of the Association, Dr. Smith, of Donoughmore. The report furnished by the Council stated that in the early part of the year the Association narrowly escaped destruction, its finances being in a deplorable state, but so far it has weathered the storm, and no liabilities exist. During the year the Coroner's Bill (Ireland) has been under the consideration of the Council, and certain clauses affecting materially the interests of medical witnesses in Ireland have been prepared for introduction into the Bill. It is proposed in the ensuing year to take up various grievances of the Poor-law and dispensary medical officers, and to consider the best means of having them remedied, under the following heads—viz., those of Poor-law and dispensary medical officers, public vaccinators, registrars of births, deaths, marriages, and vaccinations, sanitary officers, and consulting sanitary officers. An amalgamation has taken place with the Poor-law Medical Officers' Association, which is satisfactory; two societies working for similar objects being now united.

DIPSOMANIA IN ROME.

THE abuse of alcoholic liquors is deplorably on the increase among the Latin races in general, and the Italians in particular. The Roman physicians have had their attention rather pointedly drawn to the fact in the Eternal City, where, in addition to the usual crimes of violence, the increasing dipsomania has enhanced the periodical returns of disease and death from maladies of the nervous system. Take, for example, Dr. Fiordispini's last report on the cases and causes of insanity in the Manicomio. Chronic alcoholism, with its foster-child general paralytic dementia, figures largely in his pages. And no wonder. Few climates are so little tolerant of alcohol, even when moderately indulged in, as that of Rome. Its temperature, almost invariably warm and humid, relaxes the muscular and nervous energies, and favours somnolency—a condition which, by "slowing" the circulation, conduces to hyperæmia, cerebral, abdominal, and hæmorrhoidal, and causes fatty degeneration through deficient oxidation of the albuminates. The histological modifications thereby induced are soonest and most determinately operative on the brain, with the obvious results. Dr. Fiordispini appeals to the guardians of public hygiene in Rome to diminish the number of liquor-shops already more than sufficient, and to co-operate with the medical profession in combating a vicious propensity so insidious in its advances and so disastrous in its results.

FLOWERS IN HOSPITALS.

THE suggestion made a few days ago to decorate and enliven the wards of our hospitals with flowers is a happy one, and deserving of liberal support. Already several of the hospitals are, during the summer months, supplied with flowers through the aid of the Flower Mission or by private benevolence. But much needs yet to be done. If those rich and highly favoured persons who, in their country and suburban residences may be said to repose on beds of roses and to breathe ambrosial odours in place of fog and smoke, consider what gratification they derive from their gardens and their flower-pots, they may get some conception of the real joy and pleasure with which the poor sufferers in hospitals regard even a tiny nosegay of wild roses. As attention has now been directed to the subject, we feel sure that no further appeals will be necessary to have this want fully and regularly supplied, and a speedy response may confidently be looked for.

THE COLLEGE OF PHYSICIANS.

THE President and Fellows of the Royal College of Physicians gave a *conversazione* on Wednesday last at the College, in Trafalgar-square. A numerous and distinguished company were present, including the Duke of Wellington, Sir Jas. Paget, the Medical Director-General of the Navy, Prof. Owen, and many others. Dr. Billing lent some rare gems for exhibition, a great many paintings and other works of science and art were shown, and the ubiquitous Captain Boyton exhibited Mr. Merriman's life-saving dress and apparatus. The scramble in the cloak-room was on a mitigated scale as compared with last year.

MINER'S PHTHISIS.

THE pathological anatomy of the form of phthisis which results from the inhalation into the lungs of fine particles of charcoal has been carefully studied by M. Proust in the lungs of workers in copper and brass foundries, who in France suffer severely from this affection. He has found that the passage of the carbonaceous particles into the substance of the lung occurs only in the alveoli, where they pass through the layer of epithelial cells which line the alveoli, and the fine membrane which supports the epithelium. They accumulate in the interalveolar tissue, and cause there a hyperplasia of the connective-tissue elements. The black matter forms nodules, more or less bulky, which break down, and thus cavities result, filled with a dark-coloured pulp. He gives the disease the very unnecessary and cumbersome designation proposed by Zenkey, of "anthracosic pneumo-coniosis." "Carbonaceous phthisis" would be an equally exact and much more convenient name.

PHOSPHORUS POISONING.

SOME interesting experiments have recently been made by MM. Thiernesse and Casse on the value of injections of oxygen into the veins as an antidote to phosphorus poisoning, and they found that its power of neutralising the toxic effect was very great, the symptoms of poisoning soon ceasing. The poison was in some cases injected into the veins dissolved in oil, in others administered by the mouth. The oxygen was at first injected dissolved in defibrinated blood, but it was found that the quantity of oxygen that could be introduced in that way was insufficient to counteract the poison. The injection into the veins of pure oxygen, however, was perfectly successful. The experimenters found it necessary that the gas should be pure, free from all admixture with air, and that it was requisite to introduce it slowly into the circulating current. This quantity necessarily was large, several hundred cubic centimetres being required for an animal weighing twenty pounds. The precise apparatus employed is not described.

SALARIES OF SANITARY OFFICERS.

A PARLIAMENTARY RETURN has been published of the sums allowed out of the imperial exchequer, in 1873 and 1874, to each urban and rural sanitary authority in England and Wales towards the salaries of medical officers of health and inspectors of nuisances. No doubt the return is made accurately to the terms of the motion upon which it was given, but it is not the less perverse on that account. The districts in combination and those not in combination are not shown, so that, unless by a considerable expenditure of time, the return is useless except for particular localities.

AT this season of the year numerous appeals are published in the daily papers for subscriptions towards defraying the cost of taking schools and bodies of children to the seaside

and to country resorts at short distances from town. We would do all we could to ensure the success of such appeals. To those who have observed the beneficial change wrought by a few hours of recreation and play in green fields on the wan, sallow-faced children whose homes are in alleys and dark courts, nothing can be more gratifying than an attempt to regulate and systematise these excursions into the country. A correspondent of *The Times* suggests that a central fund should be formed to which those who sympathise with the movement could send their contributions. The managers of such a fund would issue appeals and circulars as at present done by the managers of various schools, the money raised to be divided according to the number of boys and girls in each institution. The scheme appears to be a very feasible one.

THE Keighley Board of Guardians are by this time in a position to estimate the fatal results of the blind prejudice and ignorance which influenced them so far as to suspend the enforcement of the Vaccination Acts in the district. Small-pox now prevails to an alarming extent in the town and neighbourhood. It should be known that during the past month seventy cases in all were reported by the medical officer, nineteen of which proved fatal. We hope the lesson taught at Keighley will have a salutary effect in other parts of the kingdom, and will help to undeceive the people who are misled by the pestilent trash circulated by the Anti-Vaccination League. Is it not possible to stop the wholesale distribution of post-cards printed with grossly untrue statements concerning vaccination now going on?

WE are glad to see analysts going occasionally out of the beaten track in fulfilling their duties under the Adulteration Act. An odd assortment of samples of food and drugs seems to have been examined lately by Mr. Wigner, analyst to the Woolwich District Board of Works. The articles included two samples of cooper (which is, we believe, a mixture of porter and light ale), some rum, gin, laudanum, and blue pill (pil. hydrarg.) It is satisfactory to learn that nearly all were reported to be unadulterated, although the blue pill did not contain its full proportion of mercury, and one of the gins was declared to have been kept in a dirty vessel.

IN London 1335 deaths were registered last week, including 2 from small-pox, 24 from measles, 70 from scarlet fever, 10 from diphtheria, 64 from whooping-cough, 23 from different forms of fever, 31 from diarrhœa, and 180 referred to diseases of the respiratory organs. Two fatal cases of enteric fever were recorded in the University College Hospital. It will be observed that the mortality from diarrhœa is steadily increasing, and will now probably continue to do so. Mr. Thoms will be pleased to learn that the death of a woman was registered in the St. George's Union Workhouse, Fulham-road, at the reputed age of 106 years.

WE have much pleasure in announcing that Surgeon-Major Samuel Rowe, who highly distinguished himself in the late campaign against the Ashantees, has been appointed Administrator of the Gambia and Lieutenant-Governor of H.M. West African Settlements. Dr. Rowe will sail for Sierra Leone on the 19th inst.; and we wish him every success in the duties of his new position, for which he is especially fitted by his long and intimate acquaintance with the natives of the West Coast of Africa.

THE *Army and Navy Gazette* states that Dr. Macleod, Inspector-General of Hospitals, has been, owing to his great zeal and ability, reappointed to the charge of the hospital at Great Yarmouth for a further term of years.

IN the House of Commons on Monday last Sir M. Beach, replying to a question put by Mr. Lyon Playfair, stated that there were very few licentiates of the Apothecaries' Hall in Ireland who restricted themselves to pharmacy, and who did not at the same time practise medicine or surgery. As there is no other class of men who, under the existing law, can legally dispense medicines, Sir M. Beach might have well alluded to the Pharmacy Bill for Ireland now under consideration, the passing of which will place druggists in that country in the same position as their brethren in England.

WE learn that Her Majesty's ships-of-war on the Australian station are suffering severely from typhoid fever. At the port of Sidney, cases continue to be sent on shore for medical treatment. The *Pearl* and *Eagle* had some of their men down, while thirty-four of the *Barracouta's* crew were in hospital. It has been stated that the sanitary condition of some of the ships is extremely unsatisfactory, and of a nature to account for the outbreak of enteric fever.

IT has been stated in the *Globe* that the young gentleman known as the Prince Imperial of France recently rescued Dr. Russell Reynolds from an impending accident, the doctor's horse having run away on Blackheath. We are enabled to contradict the report so far as Dr. Reynolds is concerned, who knows nothing of the occurrence described.

WE are glad to find that Mr. T. Cave has given notice in the House of Commons that he will at an early day call attention to "the gross and wilful neglect of the authorities of Oxford in reference to the sanitary condition of the town, and to the consequent danger thereby arising to the health of the students and the inhabitants."

THE small but select list of bores in the House of Commons have found a congenial ally in Mr. Stansfeld, upon whom the mantle of Colonel Sibthorp seems to have fallen. Mr. Stansfeld's flippant remarks on the College of Surgeons Amendment Bill have done nothing to dignify the cause of female medical education, of which he is a champion.

DR. STEVENSON, medical officer of health for St. Pancras reports the prevalence of scarlet fever in his district, especially among the poorer classes. Measures of disinfection and isolation are being pursued. Dr. Stevenson speaks highly of the value of the disinfection of clothing by heat.

MRS. HERVEY, of Southsea, has presented a prize, of the annual value of £10, in memory of her husband, the late Dr. Hervey, to be competed for annually by the foundationers of the Royal Medical Benevolent College, Epsom; the holders of the Carr scholarship to be alone excluded.

THE annual distribution of prizes at St. Mary's Hospital Medical School will take place in the board-room of the hospital on Wednesday next, June 23rd, at 3 P.M. Mr. Grant Duff, M.P., will preside.

THE next, and we believe the final, discussion on Puerperal Fever will take place at the Obstetrical Society's rooms on July 7th. It is stated that Dr. Fordyce Barker, of New York, has signified his intention of being present.

DR. HORNER, we understand, is to be the medical officer on board the *Pandora*, which is expected to leave England on the 23rd inst. for the Arctic regions.

MR. J. NETTEN RADCLIFFE has been elected President of the Epidemiological Society.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Session 1875.

THE opening proceedings of the General Medical Council were rather unexciting. The President intimated that some questions of interest will engage the attention of the Council, but up to the time of our going to press the discussions were very dry and dull. Dr. Acland intimated that the opinion of the Council on two measures is desired by the Government—viz., on that of Sir John Lubbock for enabling the Royal College of Surgeons of England to join in a Conjoint Scheme, and on that of Mr. Cowper Temple for Registering Women holding Foreign Degrees. Sir John Lubbock's Bill has already passed through committee, and we may hope is safe from the undignified opposition of Mr. Stansfeld. The absurd measure of Mr. Cowper Temple cannot give the Council much trouble if the discussion is restricted to the mere question of passing a Bill for the sole purpose of enabling the Council to register female foreign graduates. The Medical Act cannot be tinkered by such a partial and objectionable alteration as this. But Dr. Acland said that in the opinion of His Grace the Duke of Richmond the whole question of the state of the law in reference to the education of women for medical purposes must very soon come before Parliament, and the Lord President is anxious, in view of this event, to be in possession of the views of the General Medical Council. It is not unlikely, then, that our next number may contain the account of more lively proceedings on the part of the Council than our present does. Lord Sandon, too, has promised Mr. Stansfeld that this subject shall be considered by Government. So the opportunity for a sound and statesmanlike view of this difficult question on the part of the Council has fully come, and we hope it may be so used as to maintain and enhance the Council's reputation.

We regret that Dr. Acland treated the great question of Conjoint Schemes with conspicuous reticence. No doubt the subject is a delicate one to be handled in the vague terms of an opening address, but a question that has attracted so much attention in Parliament and in the profession deserved more notice at the President's hands. It always did receive such notice at the hands of the late President.

One or two questions of a judicial character and of some interest came before the Council. One, in the shape of a request from Dr. Bass Smith to be again put on the Register, brought up Sir William Gull in favour of the doctrine of a *locus penitentiæ* for men whose names have been erased. Considering that men have only one life to live, and that other professions do occasionally reinstate men, we are not disposed to advocate that all the sins for which men's names are erased should be considered unpardonable. But the coolness of Dr. Bass Smith's application so shortly after his case has been adjudged by the Council, and the nature of his offence, made the duty of the Council easy, and they at once declined to comply with his petition. It is a most anomalous fact that though his name is erased from the Register he still retains all his qualifications.

The annual meeting commenced on Thursday, under the presidency of Dr. Acland. The only new member of Council was Dr. Rolleston, representative of the University of Oxford.

The President delivered his address, which will be found in another part of our impression.

Some returns having been laid before the Council, and certain formal business transacted, a long letter was read from Mr. Matthew Bass Smith, whose name had been erased from the Register, applying to have it restored. The application was, however, refused.

A letter was read from the Medical Department of the Privy Council, asking the opinion of the Medical Council on the subject of Mr. Cowper Temple's Bill with reference to the registration of women who have taken the degree of medicine in a foreign university. Some discussion took place as to the method of dealing with this letter, and it was ultimately referred to a committee for the purpose of having the various questions involved put into a definite shape for the consideration of the Council. The committee consisted of Sir Wm. Gull, Sir D. Corrigan, Mr. Quain, Dr. Humphry, Dr. A. Wood, Mr. Turner, and Dr. Rolleston.

An application from Miss Ellen M. Greenstreet, that a licence which she had obtained from the King and Queen's College of Physicians in Ireland might be registered as a licence in midwifery, was the subject of some discussion, and the documents forwarded to the Council on the subject were ordered to be submitted to Mr. Ouvry for his advice as to whether the licence was entitled to registration.

The Council shortly afterwards adjourned.

[A more detailed report will appear in our next number.]

New Inventions.

AN INSTRUMENT TO FACILITATE REMOVAL OF GROWTHS FROM THE FEMALE URETHRA.

MESSRS. KRONE & SESEMANN, of Duke-street, Oxford-street, have submitted to our inspection a simple instrument, made by the direction of Mr. Thomas Bryant, to facilitate the removal of growths from the female urethra by means of the galvanic cautery. The instrument, as shown in the engraving, is a dilator, speculum, and protector. As a

dilator it is readily introduced, without any previous dilatation, when the patient is fully under the influence of an anæsthetic; and it can be rotated and moved backwards and forwards. As a speculum, it allows inspection of every part of the canal, and exposes to view any growths (the growths falling into the slot of the instrument) which may be situated at the anterior or posterior part of the urethra. As a protector, it covers every part of the canal with a non-conducting surface, leaving only the growths exposed; these can thus be readily removed with a platinum wire loop, or destroyed by a larger or smaller cautery, galvanic or otherwise.

These Bryant's dilators are made in sets of three different sizes, of boxwood and of ivory. They have been already freely used, and with marked success.

THE DISPOSAL OF SLOPS.*

SLOPS (adopting the definition of Dr. Cornelius Fox) may be said to consist of soapy water, rain water, a small quantity of urine, and in some cases the overflow of cesspools. "The abatement of nuisance from slops," says the author of the Report, "including under that term the whole liquid refuse of a household, is part of the wider question of the disposal of sewage." But inasmuch as in isolated houses and hamlets it is not found practicable to deal with it under the conditions applicable to sewerage in general, it has been necessary to consider if any, and if so, what, efficient means are at the present time adopted for the disposal of the slop-water of villages and solitary dwellings.

* Conclusion of Mr. Netten Radcliffe's Report on the Abatement of Excrement Nuisances.

Four or five methods are described in detail by Mr. Radcliffe, all of which have as their ultimate object the utilisation of the slops for garden purposes. The most workable plan appears to be that invented by Mr. Rogers Field, C.E., comprising a tank fixed near the outer wall of the cottages, into which all the slops pass by a disconnected pipe over a trapped grating, and in which they accumulate until the tank is completely filled, when a syphon is brought into action automatically through a small pipe leading into sub-irrigation drains laid below the surface of the cottage gardens. The interior of the tank should be cleansed, and the deposit (a useful manure) removed once a month. A description follows of the automatic sewage meter, designed by Messrs. Bailey Denton and Field, which is in principle similar to the apparatus above described, and is now in very successful operation in the hamlet of Eastwick, near Leatherhead, in Surrey. The reader must be referred to the Report for numerous diagrams explanatory of the above plans. Other methods are described as being in operation severally at Halton, Bucks, at the cottages of the Industrious Aid Society, Hereford, and at Fordington, Dorsetshire, where Mr. Moule has systematised a very successful mode of dealing with sewage in connexion with the dry-earth system. It may be here remarked parenthetically that Dr. Cornelius Fox, medical officer of health for Central and East Essex, has written a pamphlet on this subject, which describes very clearly the evils that exist and the difficulties in the way of removal. We consider it sufficient here to draw attention to the best methods at present known for the disposal of slop refuse. It is a subject that in one or other form confronts the health officer of rural districts most conspicuously, and it is one of his prominent duties to advise its removal and disposal, so that it shall cease to be an eyesore and a nuisance by collecting around dwellings in stagnant pools, and also that it shall not foul ditches, running streams, or water-courses of any kind.

SKETCHES OF CONTINENTAL HOSPITALS.

(By our Special Correspondent.)

VIII.—BERLIN.

(Concluded from page 706.)

HAVING in my former article on Berlin given a brief account of the University, Augusta and Jacob's Hospitals, it now remains for me to give a sketch of the other principal hospitals of that city—the Charité, Bethanien, and Stadt Hospitals.

First in size and importance is the famous Charité Hospital, at which clinical teaching is thoroughly carried out by Frerichs on Medicine, Bardeleben on Surgery, Virchow on Pathology, and by others of less general renown. It is a royal institution, having 1300 beds, arranged in special blocks, devoted severally to medicine, surgery, syphilis, and to the treatment of the insane. In the ample grounds surrounding these blocks are cheerful gardens and shady groves, in which the convalescents may find health and recreation. The wards are large, lofty, and well lighted, the floors are waxed and dry-rubbed, the ventilation is good, and the whole aspect of the hospital is cheerful, clean, and wholesome; the beds are of iron and are not closely packed; they do not go nearer the walls than a yard, so that students can surround the patient during the clinical visit. Pyæmia is unknown, and erysipelas is rare; when it occurs it is treated by the continued application of cold and by the ether spray, and it is said with good results. Nowhere on the continent is Lister's treatment of wounds so thoroughly followed out, and nowhere are its excellent effects better seen than in the wards of Prof. Bardeleben. Amputations, resections, and even the more trifling operations, as opening of abscesses, &c., are conducted under the carbolic spray, and subsequently treated with the eight coverings of carbolised gauze, protective covering, gauze bandages, and carbolised cotton-wool, exactly as practised by Prof. Lister himself. That wounds treated in this way do absolutely heal without suppuration may be seen constantly, but I shall content myself with a few illustrative cases. A man, from whose leg a large callus, the result of a compound fracture two years previously, was removed by the chisel and gouge, recovered without suppuration, and was able to walk well a month after the operation. A large mass of strumous glands was excised from the neck of a man, the carotid artery and jugular vein being both exposed during the operation; five days later there was not a drop of pus, and the line of incision was healed. In a case of abscess of the interior of the tibia where there was much osseous eburnation, the cavity had been opened by the trephine and then gouged without any suppuration following, and forty days after, the limb was sound and cicatrisation perfect. Combined with Lister's treatment, Bardeleben makes free use of Chassaignac's drainage-tubes, and, in cases of amputation, applies a carbolised sponge within the antiseptic dressing, to absorb any blood or serum that may exude.

The Pathological Institute, where Virchow labours, is on the left side of the main square of the Charité. It has recently been enlarged and extended. It contains a handsome new post-mortem room, a museum which is not yet finished, a large lecture room where microscopic demonstrations are given daily, and laboratories devoted to physiological and pathological chemistry. The microscope room has five tables, each two feet wide. These tables have a central groove in them along which the microscopes travel, and are arranged in such a way that the specimens pass from student to student, so that all may see the specimens in succession without it being necessary for them to rise from their seats. There are places numbered for 120 men, and frequently the greater part of them are occupied by students charmed with the lucid descriptions and admirable demonstrations of Prof. Virchow. His diagrams on the black board, and his patient, earnest style of teaching, charm the attention of his audience, and for two hours at a time the most perfect silence is preserved, whilst the various moist and dry pathological specimens and microscopic preparations are being demonstrated and their cause, nature, and history are being succinctly explained. The department of pharmacology, so ably presided over by Prof. Oscar Liebreich, is conducted in a building not far from the Charité Hospital, and here the professor is able to induct from twelve to twenty students into the mysteries of the art, which in his hands seems destined to raise therapeutics out of the domain of empiricism. His experiments on chloral and croton chloral are, it is said, shortly to be supplemented by the introduction of a new sedative to the profession. It seems a great pity, even if it is not a great wrong, that eminent teachers of this department of science, like Liebreich of Berlin, Binz of Bonn, and others, should not be elected physicians to hospitals, but be confined to their laboratories. They would thus have an opportunity of practically testing the value of their new remedies on their own patients.

The Bethanien is a new rich protestant institution, nursed by *religieuses*, and extremely well conducted. It has 186 surgical and 80 medical beds, under the charge respectively of Dr. Willms and Dr. Goldhammer. The corridors are wide and well lighted, and the wards contain 10 beds each, each bed being placed one foot from the wall. There are special wards for children and for private patients, a barrack for 6 beds, standing in the midst of an ample garden, where fresh wounds are treated almost in the open air with excellent results, and another large and more solidly-built barrack, containing 24 beds, in which contagious cases are placed. One unusual feature about this hospital is that in a roofed corridor running round the side of the building which faces the garden, but which is otherwise open to the air both night and day, are 12 beds for children with surgical diseases. Children, without even curtains to their beds, spend the summer in this spot, and they are said to do so with impunity. I even noticed one little girl, aged four years, for whom tracheotomy had been performed for a papillomatous growth of the larynx, lying in this corridor; and, although she was taken into the hospital at night, she bore the exposure to the air during the day perfectly well. Tracheotomy for diphtheritis is often practised, and, during the last year, of ninety cases, forty were followed by recovery. Wounds are treated either by chloride of zinc applied in stick and then by cotton-wool and oil-silk protective, or on the open principle with frequent application of a weak solution of calx chlorinata—5 parts dissolved in 100 of water. No case of syphilis and

no cutaneous diseases are admitted, and there are no special ophthalmic wards.

The Stadt Hospital of Berlin, which is just about to be opened, may be supposed to represent the most recent and most enlightened views upon hospital construction. It stands on an elevated site, just outside one of the parks of the city, and covers a large extent of ground. It comprises six large red brick detached hospital blocks of two storeys, four smaller of one storey, and four separate single blocks, one of which is devoted to the church, another to the kitchens, another to the mortuary and post-mortem room; and, lastly, a large building, having the admission rooms and offices below, and the officers' apartments on the upper floors. Each of the larger pavilions contains a ward on the ground floor, 35 yards by 10, one on the first floor of equal size, and beyond each of them a day-room of the same width as the wards, and eight yards in length, and also two small separate rooms for special cases. At one extremity of the main wards are the nurses' room and a kitchen provided with a sink and a gas stove, and at the other the bath-room, water-closet, and urinals. There are windows on either side reaching to the ceiling, and opening at the top, and also apertures covered with perforated zinc, two feet square, near the floor, for the admission of cold air. Each ward is heated by two large calorifers in the middle line, and one open fireplace at the extreme end. All the wards are built on the same principle, and all are furnished with iron bedsteads, and fitted up in the plainest possible manner. Dr. Trendlenburg, a former assistant of Prof. Langenbeck, has been appointed medical director of the establishment.

Correspondence.

"Audi alteram partem."

CHARITY VOTING REFORM.

To the Editor of THE LANCET.

SIR,—In a recent number of THE LANCET you remark that the existence of a grave evil in the present system of voting at charitable institutions has been sufficiently proved, but that a satisfactory remedy has not yet been demonstrated. On the last point you have hardly done justice to the Charity Voting Reform Association. It has been repeatedly shown that, with rare exceptions, our provincial and Scotch charities have nothing to do with the wasteful demoralising scramble which goes by the name of an election, while in London itself the benefits of many of our best institutions are satisfactorily dispensed upon the principle of selection by a responsible committee, appointed by subscribers. The practice of the Corporation of the Sons of the Clergy will be seen from the following recent abstract of their proceedings:—"The cases of 76 widows and 82 aged or invalid single daughters of deceased clergymen were brought before the Board, *after being carefully considered by the Standing Committee appointed to examine and report upon all applications for relief from the funds of the Society*, and thereupon 21 widows and 18 daughters were elected to pensions of £20 per annum, to fill vacancies which had occurred in the pension list during the last year, and the sum of £1100 was distributed among 50 other widows and 62 daughters." Two excellent medical charities (the British Medical Benevolent Fund and the Society for Relieving the Widows and Orphans of Medical Men), the National Refuges for Homeless and Destitute Children, for which £25,000 a year is now raised, the Boys' Home, Regent's-park-road, and many other London institutions, great and small, are administered on the same principle. In other cases, although voting is maintained, the list of candidates is thoroughly sifted by the Committee, and limited to a reasonable proportion to the number of vacancies, previously to its being submitted to the subscribers, and canvassing by cards and circulars is strictly prohibited. This is the practice of the National Hospital for the Paralysed and Epileptic, which is explained by the secretary as follows:—"The founders having left the election of pensioners to the subscribers, it was resolved in general meeting that, in order to obviate the suffering and expense caused to unsuccessful candidates, the customary system of canvass by printed cards be abolished; that no canvassing be permitted; and that particulars of the cases of the candidates be supplied to the subscribers that, uninfluenced, they may discriminate between their respective merits." Although far from being a complete remedy, this is a great improvement upon the unrestrained canvassing and ignorant voting of a multitude of candidates and subscribers.

I am, Sir, yours, &c.,
C. E. TREVELYAN,
Chairman of the Committee of the Charity Voting Reform Association.

London, June 10th, 1875.

To the Editor of THE LANCET.

SIR,—Many of your readers will be pleased to learn the great success which has, so far, attended a memorial to the Council of the Royal Medical Benevolent College, praying for the abolition of the canvassing system in that institution.

No less than 2066 subscribers have signed in favour of the memorial, and many names are being daily added to the list; whereas only 246 subscribers have dissented from the prayer of the memorial.

I am, Sir, your obedient servant,
G. W. SHERLOCK,
Secretary, Charity Voting Reform Association.

30, Charing-cross, June 16th, 1875.

THE DISCUSSION ON PUERPERAL FEVER.

To the Editor of THE LANCET.

SIR,—May I ask the favour of the correction of the report of the remarks I made on Dr. Tilt's speech at the last meeting of the Obstetrical Society of London, which made them quite ambiguous. It should have been: Of the three-fourths of the cases of which I had analysed the surroundings and which I found connected with "animal poisons," zymotic and putrid matter, more than half were associated with scarlet fever. Of these about half had the usual symptoms of scarlet fever, the rash, &c., while the others had the usual symptoms of what we have hitherto called "puerperal fever," but they were in such close association with scarlet fever that one could not refuse to acknowledge the clinical importance of the facts. I further added that erysipelas and diphtheria, though in less numbers, were associated in the same way.

I may add that in the paper to which Dr. Tilt and others did me the honour to allude, and also elsewhere, I have never stated that the proportion there given was the average of ordinary practice, but only for consulting practice. For the true proportion I have asked our Fellows for information. Till a large number of instances are obtained we shall still be arguing. In private practice these cases are but few compared to the number seen by consultants in so large a place as London.

I remain, Sir, yours, &c.,
J. BRAXTON HICKS.

June 15th, 1875.

CATHETER STAFFS.

To the Editor of THE LANCET.

SIR,—In a footnote to an account of his converted Wakley's stricture dilator, in your issue of May 29th, Mr. Teevan is under a misapprehension respecting Fergusson's catheter staff. This, he says, "was a great improvement upon the staff employed by the late Professor Syme, but it lacked a sliding catheter." Now this is just that which it does not lack. The set as sold by Matthews for many years past (he made them for me about 1856) contains three elastic catheters, with a smoothly bevilled open end, intended to be slid over the staff into the bladder before this is withdrawn after the stricture has been divided.

I have always taught my class that the certainty of knowing that the staff is in the bladder by the escape of urine through its tubulated part, and the sliding gum-elastic catheters, are the really valuable points in this apparatus. I am, Sir, yours faithfully,

Old Burlington-street, W., June 15th, 1875. J. W. HULKE.

THE SUBCUTANEOUS TREATMENT OF VARICOCELE.

To the Editor of THE LANCET.

SIR,—Will you permit me to make a few remarks in reference to Mr. Barwell's article in last week's LANCET on the treatment of varicocele.

The principle of the subcutaneous treatment of varicocele is of course by no means new. For the last nine years Mr. Wood, of King's College Hospital, has operated for varicocele by a method which, though somewhat similar in principle to that proposed by Mr. Barwell, is, I submit, superior, inasmuch as the ends of the wire loop that surround the spermatic veins are passed through an instrument specially devised by Mr. Wood, so that the loop is steadily tightened by means of the constant action of a spring. In this way all that subsequent daily tightening up of the wires round the little "belaying pins" on Mr. Barwell's disc, which must necessarily cause intense pain to the patient, is avoided. The veins, moreover, are cut through in a much shorter time. An account of this operation and a woodcut of the instrument will be found in THE LANCET of July 4th, 1868. I may add that when house-surgeon and surgical registrar at the hospital I had abundant opportunities of witnessing this operation and judging of its efficiency. I am, Sir, yours obediently,

Old Cavendish-street, June 16th, 1875. WILLIAM ROSE.

BIRMINGHAM.

(*From our own Correspondent.*)

A MEETING of the members of the Birmingham Medical Institute was held on Thursday last, for the purpose of electing a treasurer, a committee consisting of twenty-five members, and to receive the report of the special committee appointed to frame the bye-laws. All were passed unanimously, after the introduction of some few trifling verbal alterations, with the exception of the twenty-first, which related to the mode of election, and on this point an animated discussion took place. The Bye-laws Committee unanimously agreed that the election should be by ballot, and that one black ball in five should exclude; but in spite of that, the meeting resolved by a large majority, on the proposition of Mr. Bartleet, and supported by Mr. Manby, Mr. F. Jordan, and Dr. Heslop, that "the election shall be made either by show of hands or otherwise, as they shall determine." Mr. Gamgee and Mr. Pemberton opposed the amendment, the latter contending very properly that the Society was an ethical Society as well as a library, and that the members ought to retain the power of saying to those whom they did not think fit to admit into the Society, "We don't want your company." The admission of homœopaths in future is, therefore, practically settled, but it remains to be seen whether this policy will not alienate the great body of the profession, and prevent a very large number of gentlemen becoming members of the Institute, while it may, perhaps, lead to the resignation of not a few of those who have already become members, and who have announced their intention of giving largely towards it. The ninety-five gentlemen who voted for the amendment of Mr. Bartleet form, no doubt, a strong and united section of the medical community in this district, but they should remember that upwards of four hundred medical practitioners have, in answer to Mr. Pemberton's circular, declared that they entirely disapprove of the admission of homœopaths, and they will probably refrain from becoming members now that, to use the graphic words of Mr. Jordan, the Institute opens its portals to "heretics of every shade of the profession, be they medical Jew, medical Turk, or medical infidel."

Dr. Birt Davies, who has for thirty-six years ably and assiduously filled the office of coroner to the borough, has resigned, and his successor is to be appointed at the beginning of July. The Mayor, in accepting the resignation, moved a resolution expressing the high sense the Council entertained of the zeal and ability with which Dr. Davies had discharged his onerous duties, and their respect for the intelligence and devotion which have distinguished his long and honourable judicial career. Dr. Davies carries with him into the leisure of repose which he has so well earned the respect and regard of the profession as well as of the public. There are already several medical as well as legal candidates in the field, but if any of the former is to succeed it will only be by the entire weight of the medical profession being thrown into the scale of one candidate. "Union is strength" in this as in other mundane affairs, and the medical candidates should endeavour to decide among themselves which of their number stands the best chance of obtaining the majority of votes of the Council, and the rest should give him their undivided support and allegiance.

The working men's Hospital Saturday collection for the West Bromwich District Hospital amounted this year to £756 19*s.* 9*d.*, being an increase of £161 2*s.* 4*d.* upon last year's collection. The total amount raised from this source in Birmingham amounted this year to £3838.

The Council of Queen's College have made three fresh appointments, which will doubtless increase the efficiency and add to the popularity of the medical department:—Dr. Sawyer, physician to the Queen's Hospital, has been appointed Professor of Pathology; Dr. Rickards, physician to the General Hospital, Demonstrator of Physiology; and Mr. Bennett May an additional Demonstrator of Anatomy.

Dr. Alfred Hill's annual report to the Sanitary Committee is a very lucid and careful *résumé* of his weekly and quarterly reports. It shows that the death-rate—26·78—compares unfavourably with that of the previous year, which was 24·81 per 1000. From zymotic diseases there were 2652 deaths, and the majority of these were due to scarlatina and variola. The latter disease seems to have become habituated to the place, for there are at the present time not less than 62 cases in the small-pox hospital. Need for sanitary work is shown by the statement that there are 190 miles of streets, while there are only 130 miles of sewers.

At the General Hospital, Mr. Baker has recently had a remarkable ring-like stricture of the vagina of great density, following delivery by forceps three years previously. Mr. Bartleet has performed three Roux's amputations of the foot. In two cases good stumps have resulted, and the third is still under treatment, and looking well. Mr. Jolly has had a case of fracture of both ossa calcis from a fall on the heels, in which good union has taken place.

Birmingham, June 12th, 1875.

PARLIAMENTARY INTELLIGENCE.

Week ending June 17th.

HOUSE OF COMMONS.

LICENTIATES OF THE APOTHECARIES' HALL, IRELAND.

SIR M. BEACH, in reply to a question, stated that holders of the licence practised medicine and surgery.

SMALL-POX IN IRELAND.

Mr. KIRK asked the Chief Secretary for Ireland whether his attention had been directed to the Registrar-General's reports of the deaths from small-pox in Ireland during the quarter ending 30th of June, 1874, which amounted to 123; whether it was true that out of that number 109 occurred in Ulster, where the disease was not considered epidemic, as in many instances it was imported by paupers from Scotland; and whether the Government proposed to bring in a measure with a view of preventing the spread of the disease.

Sir M. BEACH said that he could not state positively that those deaths had occurred "chiefly, if not wholly, among those who had not been vaccinated." He understood that 109 deaths had occurred in Ulster, and that in many of these cases the disease had been imported from Scotland, but he was unable to obtain any information as to whether the persons by whom it was imported were paupers or not. The Irish Government had no control over the Poor-law guardians on this side of the Channel, and it would therefore not be his duty to introduce any measure on the subject.

MEDICAL ACTS AMENDMENT (COLLEGE OF SURGEONS) BILL.

On the order of the day for resuming the adjourned debate on going into Committee on this Bill,

Mr. STANSFELD said he wished to obtain from his noble friend some statement as to the views of the Government on the right of women to study and practise medicine in this country.

Viscount SANDON replied that that great question would not be prejudiced by the Bill of the hon. member for Maidstone; but, nevertheless, he had given notice of an amendment which would show beyond all doubt that the *status quo* was in no way affected by the present measure, the sole object of which was to enable the College of Surgeons to do what the Act of 1858 was intended to enable them to do. The subject of the medical education of women had only very lately been submitted to the attention of the Government, and they could pronounce no opinion upon it. The Government would, however, consider the matter carefully during the recess, so as to be able to express an opinion next year as to whether legislation was desirable or not.

The Bill then passed through Committee.

THE HAMPSTEAD HOSPITAL.

After a long discussion, in which Mr. COOPE, Mr. FORSYTH, Mr. TORRENS, Mr. SCLATER-BOOTH, and others took part, the following amended motion was agreed to—"That a Select Committee be appointed to inquire and report upon the action of the Metropolitan Asylums Board in respect to the establishment of a fever and small-pox hospital at Hampstead."

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on June 10th:—

Clinton, Samuel Aubrey, Chislehurst.
Gibson, Charles, Tynemouth.
Lightoller, Harry Martin, Chorley.
Pletts, John Monham, Thornton, Ryde, Isle of Wight.
Prowse, William Byass, Wallingford, Berks.
Spark, John, Lee-green.
Spooner, Frederick Henry, Plymouth.

The following gentlemen passed the Primary Professional Examination on the same day:—

A. W. Woodman Dowding, London Hospital; Gilbert Saunders Griffiths, Middlesex Hospital; Arthur Frederick Parker, Bristol School of Medicine; Arthur Price, St. Thomas's Hospital; Henry Frederic Steele, St. Bartholomew's Hospital.

THE ROYAL SOCIETY.—The following gentlemen, among others, were elected Fellows of the Royal Society at the annual meeting on the 3rd inst.:—J. Risdon Bennett, M.D., A. Dupré, Ph.D., F.C.S., E. Klein, M.D., E. Ray Lankester, M.A., and W. C. Roberts, F.C.S.

THE anniversary festival of the Metropolitan Free Hospital was held last week at the London Tavern, under the presidency of the Lord Mayor. Subscriptions to the amount of nearly £2500 were announced on the occasion.

Professor BISCHOF, of the Andersonian University, Glasgow, reports that the water supply of that city, although yellowish, was almost clear, and was "quite free from evidence of previous sewage or animal contamination."

DR. HILL, the Medical Officer of Health for Birmingham, reports that the water supplied to that town in May was "slightly turbid from small particles, numerous moving animal organisms, some visible to the naked eye, and many vegetable growths."

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—The annual meeting of this association was held on the 7th inst., at the Royal College of Surgeons, Ireland, the chair being occupied by Mr. Joliffe Tufnell, who congratulated the meeting on the increasing prosperity of the Society, they being this year enabled to distribute sums in relief amongst medical men and their families to the amount of £1600. The applications this year amounted to 98, which included applications from 12 medical practitioners, and 70 from widows of medical men, 20 of the applicants applying for the first time. The sums distributed this year have been larger than on any former occasion, some of the individual grants amounting to £60. Several resolutions were passed earnestly entreating the dispensary medical officers of Ireland to join in larger numbers than heretofore, they principally benefiting by the formation of the Society, and yet comparatively few subscribe to its funds.

PROFESSOR HYRTL, OF VIENNA.—The sculptor Pilz has just finished the bust of this eminent anatomist. The work is to be placed in the Great Hall of the College of Physicians, with, in compliance with the wishes of the professor, as little ceremony as possible; but it is likely that a great concourse of professors, friends, and students will give the unveiling great *éclat*.

DR. FRANKLAND, F.R.S., reports that the proportion of dissolved organic impurity in the river waters supplied to the metropolis during May was larger than in April, but the samples drawn from the Companies' mains all showed the results of efficient filtration. The Kent Company's water, derived from deep wells in the chalk, "maintained its usual good qualities."

Medical Appointments.

ALLBUTT, H. A., L.R.C.P.Ed., has been appointed Physician to the Leeds Dispensary for Diseases of the Skin, vice Horton, deceased.

ALSOP, T. O. F., M.B., M.R.C.S.E., has been reappointed a Resident Physician to the University Clinical Wards, Royal Infirmary, Edinburgh.

CLOUTING, J. R., M.R.C.S.E., has been appointed Public Vaccinator for the recently amalgamated Thetford and Croxton Districts of the Thetford Union, Norfolk.

COTTON, H. J., M.B., C.M., M.R.C.S.E., has been appointed a Resident Physician to the Royal Infirmary, Edinburgh.

CURRIE, A. S., M.B., M.R.C.S.E., has been appointed a Resident Physician to the University Clinical Wards, Royal Infirmary, Edinburgh.

DINWOODIE, W., M.D., C.M., has been appointed Medical Officer and Public Vaccinator for the Parishes of Yester and Garvald, Haddingtonshire, vice Fairweather, resigned.

DRUITT, W., F.R.C.S.E., has been appointed a Medical Officer of Health for the Wimborne and Cranborne Rural Sanitary District: £25 per annum.

ELLIOT, H. F., L.R.C.S.Ed., L.R.C.P.Ed., has been appointed a Resident Physician to the Royal Infirmary, Edinburgh.

GEORGE, H., M.R.C.S.E., has been appointed Medical Officer for the Tetney District of the Louth Union, Lincolnshire, vice Hembrough, resigned.

GIBBONS, R. A., M.B., C.M., M.R.C.S.E., has been appointed a House-Surgeon to the Royal Infirmary, Edinburgh.

GILL, G. T., L.R.C.P.Ed., has been reappointed a Resident Physician to the Fever Wards, Royal Infirmary, Edinburgh.

GLENDINNING, G., M.B., C.M., has been appointed a Resident Surgeon to the Royal Infirmary, Edinburgh.

GOWAN, C., M.D., C.M., L.R.C.S.Ed., Senior Assistant Medical Officer at the Worcester County and City Lunatic Asylum, Powick, has been appointed Medical Superintendent of the Toronto Lunatic Asylum Canada, vice J. Workman, M.D., resigned.

GUPPY, T. S., M.D., M.R.C.S.E., has been appointed Medical Officer for the Constantine District of the Falmouth Union.

HOPKINS, A. B., M.R.C.S.E., has been appointed Medical Officer for the London District of the Great Eastern Railway Provident Society, vice Burgess, whose appointment has expired.

HOURIGAN, W. P., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer for the Freshford Dispensary District of the Kilkenny Union, vice Smithwick, resigned and superannuated.

HUGHES, W. L., M.R.C.S.E., L.S.A.L., has been appointed Junior Resident Medical Officer to the London Hospital.

JONES, C. H., M.B., F.R.C.P.L., has been reappointed a Physician to St. Mary's Hospital, Paddington, upon the expiration of his second term of office.

LEE, R. J., M.D., has been appointed a Visiting Medical Officer to the London Temperance Hospital.

M'HARDY, M. M.D., M.R.C.S.E., has been appointed Surgeon and Dispenser to the Royal Pimlico Dispensary, vice Ward, resigned.

MACLEOD, W., M.D., has been promoted from Deputy Inspector-General to Inspector-General of Hospitals and Fleets.

MATURIN, C. G., L.R.C.S.I., has been appointed Resident Medical Officer to Trinity College, Glenalmond, Perthshire.

MAY, B., F.R.C.S.E., has been appointed a Demonstrator of Anatomy at Queen's College, Birmingham.

MORGAN, G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Accoucheur to the London Hospital, vice Shapley.

MORISON, J. R., L.R.C.S.Ed., has been appointed a Resident Surgeon to the Royal Infirmary, Edinburgh.

PEARSE, F. E., M.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Longborough District and the Workhouse of the Stow-on-the-Wold Union, vice Drew.

RICE, G., M.B., C.M., has been appointed a Resident Surgeon to the Clinical Wards, Royal Infirmary, Edinburgh.

RICKARDS, E., M.B., Physician to the General Hospital, has been appointed a Professor of Physiology at Queen's College, Birmingham.

RONALDSON, M.B., C.M., has been appointed a Resident Physician to the Royal Infirmary, Edinburgh.

SAWYER, J., M.D., Physican to the Queen's Hospital, has been appointed Professor of Pathology at Queen's College, Birmingham.

SCOTT, J. H., M.B. has been appointed a Resident Surgeon to the Royal Infirmary, Edinburgh.

SMITH, C. E., M.R.C.S.E., has been appointed Physicians' Assistant to the Royal Infirmary, Manchester, vice Walker, appointed House-Physician.

SMITH, R. D., M.R.C.S.E., L.S.A.L., has been appointed Extra Junior Resident Medical Officer to the London Hospital.

UNDERWAY, S. F., M.R.C.S.E., has been appointed a Medical Officer of Health for the Wimborne and Cranborne Rural Sanitary District: £25 per annum.

WALBY, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed an Hon. Medical Officer to the Liverpool North Dispensary.

WARREN, Dr. M. A., has been appointed Medical Officer and Public Vaccinator for the Tullaroan Dispensary District of the Kilkenny Union, vice Hourigan.

Births, Marriages, and Deaths.

BIRTHS.

BLOXAM.—On the 8th inst., at George-street, Hanover-square, the wife of John Astley Bloxam, F.R.C.S.E., of a daughter.

BRECKNELL.—On the 8th inst., at Dempsterville, Felling-on-Tyne, the wife of W. H. Brecknell, M.D., of a son.

CRANKE.—On the 15th inst., at Ulverston, the wife of John Cranke, M.R.C.S.E., of a son.

DUNLOP.—On the 13th inst., at David-place, Jersey, the wife of Andrew Dunlop, M.D., of a son.

HARLEY.—On the 5th inst., at Upper Berkeley-street, the wife of John Harley, M.D., of a daughter.

LACEY.—On the 4th inst., at Woolwich, the wife of T. Warner Lacey, L.R.C.P.L., M.R.C.S.E., of a son.

MARSHALL.—On the 10th inst., at Caledonia-place, Clifton, the wife of H. Marshall, M.D., of a daughter.

MARRIAGES.

ARMSTRONG—MOORE.—On the 3rd inst., at Harton, Joseph Foster Armstrong, L.R.C.P.Ed., of South Shields, to Jane, daughter of J. M. Moore, Esq.

SEATON—WAGGETT.—On the 3rd inst., at St. John's, Notting-hill, Edward Seaton, M.D., to Florence Ann, daughter of John Waggett, M.D.

DEATHS.

BURTON.—On the 22nd ult., at Compton-terrace, Islington, J. H. Burton, M.R.C.S.E., aged 49.

LACEY.—On the 10th inst., at Woolwich (after scarlatina), Gertrude Warner, child of T. Warner Lacey, L.R.C.P.L., M.R.C.S.E., aged 1 year and 6 months.

MERCER.—On the 9th inst., at Leicester Villa, Brixton, John Thos. Mercer, M.B., aged 36.

RIDGE.—On the 11th inst., at Dorset-square, Joseph Ridge, M.D.

SHAW.—On the 10th inst., at Battersea, Geo. Shaw, M.R.C.S.E., aged 55.

STEEL.—On the 10th inst., at Forfar, William Steel, M.D., in his 79th year. Friends will kindly accept this intimation.

WILLIAMS.—On the 31st ult., at High-street, Bromley, Kent, Edward A. Williams, M.R.C.S.E., aged 74.

WOTTON.—On the 15th inst., at Montague-place, Russell-square, Henry Rendell Wotton, late of Cavendish-square, in his 63th year.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE PAINS OF CHLORAL.

A LAY correspondent, on the strength of his own experience, censures our profession in terms of unmeasured invective, on account of the sufferings of those who have become dependent upon chloral or other sedatives for their rest; but he condemns not, as might be anticipated, the prescription of the sedative, but the neglect in the investigation and management of disease, which he maintains would render the sedative unnecessary. Patients have recourse to sedatives because their doctors fail to discover their maladies, or, discovering them, fail by proper diet and care to prevent the nervous system from suffering. We sincerely wish our correspondent's charge were true; for then, although the greater blame would attach to us, the remedy were within easier reach. Alas! the root of the mischief lies deeper: in the modes of life which patients cannot or will not change; in the nervous strain, which persists in its effects when its original cause is withdrawn, and even, by its presence, maintains and perpetuates the mischief. That doctors occasionally have recourse to palliatives because they do not discover the origin of the troubles they are called upon to treat, is very true; but more often the mischief is so inextricably interwoven with the life and habits of the patient that its eradication is hopeless, and more often still the necessary effort for its eradication is more than the patient can or does achieve. But the practical intention of the article which elicited our correspondent's letter was to enforce the necessity, which his letter further urges, of changing the conditions which lead to sleeplessness rather than treating the symptom irrespective of its cause.

THE SURREY OUSE.

To the Editor of THE LANCET.

SIR,—I just write to correct an error in your last issue, wherein you say a meeting was held in this town "to consider the advisability of taking steps to purify the river Ouse, which flows through the town." A meeting was certainly held having reference to the river, but with no such object as you mention. It was simply to benefit the angler by endeavouring to put a stop to the practice of netting the river. You will, doubtless, see the difference; and while admitting the desirability of all rivers being kept pure, such an expression as "this at present foul stream" might lead strangers to a false conception as to the condition of the river, which I do not think quite deserves such a shaft. That it is not *naturally* the most attractive of rivers as to the clearness of its water may be conceded; but that it is fouled to any appreciable extent by excrementitious matter wants proof.

I am, Sir, yours obediently,
J. G. BRADEN,
Lewes, June 15th, 1875. Medical Officer of Health, Lewes.

TREATMENT OF ITCH.

IT is well known that frictions with sulphur ointment may render much worse the various inflammatory affections of the skin which are excited by the presence of the acarus. To avoid this complication, the patient should use one part of styrax to two of oil of sweet almonds or olive oil. By this means the acarus is quickly destroyed, and the skin hardly irritated.

Mr. John M'Ilwaine.—The work of Dr. Wilson Fox.

A CLASSIFICATION OF PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—As there have been of late many allusions in THE LANCET to the relations between consultants and general practitioners, you would greatly oblige me (and seven other medical men) by giving in a short annotation a practical definition of each of the terms—

"General Practitioner." (1).
"Consulting { Physician." (2).
{ Surgeon." (3).

In the minds of some country practitioners who attend any case that comes before them, and supply medicines, there appears to be a notion that a consulting physician or surgeon has no patients, save whom a general (?) practitioner has introduced. How would you define the following:—

M.B. &c., physician to one of the large hospitals in a large city, who practises as a physician (?), or, as his patients say, who gives prescriptions, and attends midwifery cases, who does often receive his £1 1s. on the spot, but still oftener is paid his £2 2*s.* or £2 10*s.*, as the case may be, at the end of a long attendance? Is a man in general (?) practice, holding medical and surgical diplomas, and who practises pharmacy, entitled to call himself physician? or should he rather write—on a lunacy certificate, e. g.,—physician and surgeon (or apothecary and surgeon if he happens to be L.S.A.)?

There are many other little points which some of us have conversed about lately of a similar nature, but the above are the chief.

I am, Sir, yours &c.,
June, 1875. ONE OF EIGHT.

*** Definitions are difficult things, and when you have got definitions there is a still greater difficulty remaining—that of finding specimens that will strictly correspond to the definitions. A general practitioner is one that attends all kinds of cases—medical, surgical, and obstetric,—and for the most part supplies medicines to his patients, who is paid annually or twice a year, and who may sue in a court of law for reasonable costs. For such legal process, however, his qualifications must accord with the character of the case for attendance on which he claims remuneration. A consulting practitioner, speaking practically, is one that is consulted frequently by his medical brethren in cases or circumstances of difficulty. For such consultations he is paid an honorarium. The class of cases in which he is consulted often corresponds to his highest qualifications. He generally has one or other of the higher qualifications. But he may have none but the ordinary qualifications. He may be in general practice, and yet, in the estimation of the public and of the profession, be a man whose opinion is, in a practical sense, worth having in consultation—that is, in addition to the opinion of a regular attendant. If a man has a special aptitude for getting into the bladder in a case of retention, or putting on forceps, or diagnosing a doubtful case, it matters little nowadays whether he is a licentiate or a fellow, whether he is an apothecary or a graduate; he will be consulted for what he is and can do. Our correspondent says that in the minds of some country practitioners there is a notion that "a consulting physician or surgeon" has no patients save those whom a general practitioner has introduced. Such an ideal physician or surgeon may exist in the "minds of some country practitioners." But he does not exist in actual life. Even in London our eminent consultants are often consulted by the patients independently of the general practitioner who in the first instance introduced the patient to the physician. The patient pays his guinea and gets a prescription, the general practitioner either never knowing or learning casually of the matter. We do not know that there is any help for this, having respect to human nature and the freedom of patients,—which have been, perhaps, too much overlooked in the discussion of medico-ethical questions. And even in London, doubtless, many patients are attended regularly by the consulting physician or surgeon without the intervention of the general practitioner. This is a more objectionable proceeding, and one unworthy of consultants of established reputation. In country towns, we fear, the distinction between the consulting and the general practitioner is still more effaced. We have heard of Fellows of Colleges drawing teeth for a shilling and attending half-guinea midwifery; and there are important provincial towns in which the leading hospital or consulting practitioners can be consulted on terms which compete with the general practitioners or even with the better class of druggists. In all of these towns, if not in London, it is to be feared that there are practitioners, ostensibly consulting, who see patients repeatedly for one fee, and who thus lower their status, and prostitute it, as it were, to the injury of the general practitioner. This is a wrong state of matters, and would justify a protest from the profession of the neighbourhood. As regards the question of titles, a practitioner must be strictly guided by the nature of his qualification. The title of physician is in a state of confusion. The public understand by it a consulting physician. It is not contrary to law for a licentiate of a College of Physicians to use it, and it could not be properly used by the licentiates of the Apothecaries' Company, though their diplomas are of equal significance. It is a hardship to be remedied one of these days that one practitioner is to be styled an apothecary, whilst another who has passed no higher examination is to be styled "physician." Meantime men should take their licences from a College of Physicians.—ED. L.

TRANSFUSION.

SUCCESSFUL cases of this operation are mostly surrounded by doubts; for it may always be asked whether the reviving means used before the operation had not the largest share in the recovery. Be this as it may, we should keep an account of the cases which end favourably. One of this kind occurred lately in Paris, at the Maison Municipale de Santé, under the care of M. Féréol. It referred to a lady of forty, who, after several miscarriages, was imprudent enough to undertake a voyage from New York to France, being far gone in pregnancy. She was confined on board the vessel, had considerable hæmorrhage, but nursed her child, and, though weak, proceeded from Havre to Paris. There she had severe loss of blood, and was conveyed to the above-mentioned hospital (a most useful institution for persons of some means, as the patients pay more or less according to the accommodation they require). Here the lady became fearfully anæmic, and the hæmorrhagic attacks became more frequent, in spite of ergot, brandy, and bark. At last she was so reduced, and the loss of blood so frequent, that plugging, compression of the aorta, and binding up of the limbs were practised; but all to no purpose. At last transfusion was performed, the blood being obtained from a young ward attendant, in good health, who kindly volunteered his services. About six ounces were thrown into the patient's median-cephalic, with a little loss, by means of Matthieu's apparatus. For about thirteen days the greatest care was taken of the patient, and the pulse, temperature, and the proportion of globules were carefully noted. She gradually recovered, and left the hospital six weeks after admission, and thirty-six days after the transfusion, which had been effected with *undefibrinated* blood. It will occur to everyone that the simplest apparatus should, if possible, be used; that one such apparatus should be kept in every hospital; that it should be easily obtained at a surgical instrument maker's; and that all surgeons, young and old, should be well practised in the different steps of the operation.

R. S. V. P. should consult his medical attendant.

THE PRACTICE OF DELIVERY ON CHAIRS.

To the Editor of THE LANCET.

SIR,—I am unwilling that the adverse comments which have lately appeared in THE LANCET should pass unnoticed by those practitioners (of whom I am one) who have been accustomed to rely upon this position as a useful method of expediting delivery. It is a practice which has from time immemorial prevailed in the northern counties of England, where it is considered to be a powerful auxiliary in cases in which there exists some slight obstruction, which the ordinary position on the left side is inadequate to overcome. In tedious labours, when they have advanced into the second stage, such as are so frequently met with in primiparæ, it has been found to be most effectual, and will very frequently avert the necessity for the more unnatural, more forcible, and therefore more dangerous method of delivery by instruments. It would be an error to suppose that this is the position in which women are generally delivered in the northern counties. The ordinary practice differs not from that adopted elsewhere.

There are two aspects which this subject presents—one practical; the other frivolously sentimental.

I presume that it is a maxim universally accepted by the profession that personal comfort should never be allowed to interpose where the speedy relief or safety of a patient is involved. I assume, too, what no reasonable man will doubt, and what those who have had extensive experience are convinced of, that the sitting position with the shoulders inclined forwards is that in which the expulsive efforts, voluntary and involuntary, are most effective. It must be just as clear also that, mechanically, the child by its weight adds considerably to these efforts; while in the recumbent position on the left side the child is a burden to the uterus. It seems unnecessary that I should dilate on this point. It is too self-evident to require substantiation by argument or illustration. Seeing, then, that reason dictates, and experience has confirmed, that this position will expedite delivery, save much suffering, and to some extent ensure the safety of mother and child, I contend that the end justifies the means.

The next point to consider is the less important one of indelicacy. When labour has advanced to the end of the first or into the second stage, when this position has been found to be advantageous, the patient has become so familiarised to the presence of the medical attendant that, under the influence of extreme suffering, she will willingly consent to any course which promises her speedy relief; her natural feelings of modesty have become to a great extent blunted.

Let me briefly describe the manner of procedure more exactly than your correspondents have seen fit to do. The chairs having been arranged in the manner already explained, a counterpane or other screen is thrown across the backs. The patient is then placed *in situ* by her female attendants. Thus far there need be no exposure—indeed not more than in the ordinary position in bed, and decidedly less than is often the case when forceps are used, or in many of the operations for diseases incidental to women, and it must not be forgotten that this position is only resorted to in cases beset with some difficulty, and when it is probable that otherwise instrumental aid would have to be employed. Oftentimes within half an hour the change of position results in safe delivery, and it is the frequent observation of its obvious effect which has led the female attendants to place confidence in it. Women who have once experienced its benefit have often been known to request its repetition. In every respect it has the advantage of cleanliness—decidedly as regards the couch of the patient. This ought *primâ facie* to be evident. The only sound objection would appear to be an increased risk of post-partum hæmorrhage. This, however, is easily avoided by having the patient removed to bed before the placenta comes away. I always adopt this course, and have never seen any such consequences ensue.

The danger from the child falling upon the floor, as related by a correspondent to have occurred in his case, I do not hesitate to affirm could only arise through the carelessness or clumsiness of the accoucheur, who, if he could not prevent such an occurrence, could scarcely be expected to manage with dexterity the more difficult and more serious operation of delivery by forceps, which is the alternative in the only cases in which this position is practised.

I am, Sir, yours truly,

Jarrow, June, 1875. ROBERT HUNTLEY.

THE APOTHECARIES' SOCIETY.

WE are glad to hear that there is some hope of reform in this venerable body. It seems to have commenced in this wise: By two bye-laws, each member is called upon to give two dinners—one on the Lord Mayor's day, the other on the day of the "general herbarising." These dinners have cost each member, who have in rotation been called upon to give them, from £27 to £34 each. This, we hear, has been grumblingly submitted to until a well-known provincial hospital surgeon has, while submitting to it, determined to agitate the whole matter of the bye-laws with regard to their revision. As these bye-laws are old-world and very arbitrary, we wish him and other reformers, who, we hear, are numerous, God speed. The absurdity and hardship of this general herbarising dinner are shown in the fact that no herbarising is even attempted on the occasion.

DR. HARDWICKE.

To the Editor of THE LANCET.

SIR,—Mr. Lindsay's letter in your journal of last week has been brought under the notice of Dr. Hardwicke, who regrets to find that anyone apparently so ignorant of Coroners' law should attempt to write on the subject, much less use offensive terms when giving *his* opinion on the conduct of the Court.

Mr. Lindsay first states that "Dr. Hardwicke would not allow a post-mortem examination" in the case alluded to in his letter. He should have said that "Dr. Hardwicke did not order a post-mortem examination." It is not in the power of the coroner to prevent or disallow a post-mortem, should a majority of the jury desire that one should be made. Your correspondent's next error is the supposition that the medical man who usually attended deceased was not summoned, "doubtless from reasons of economy." Mr. Lindsay, "doubtless," is not aware that the coroner has power only to summon *one* medical witness, except at the written request of the jury; hence "economy" has nothing to do with the question. Mr. Lindsay then seems a little upset because he was not favoured with a post-mortem. If, after hearing the evidence connected with the death of the deceased, and a description from the widow of the symptoms of the disease from which deceased had been suffering, together with the testimony of deceased's medical attendant as to the condition of the heart, the senior house-surgeon of St. Mary's Hospital was unable to arrive at a rational conclusion as to the cause of death, it is perhaps to be regretted that he was summoned at all, and that the county was put to the expense of a guinea for a witness who required so much pressing to extract from him a legitimate opinion, which from the facts of the case could have been given without difficulty—much less, indeed, should the magistrates (of whom Dr. Hardwicke is so much in dread!) have been called upon to transfer a second guinea from the county exchequer to the pocket of your correspondent. The exact pathological condition of the heart might have been very interesting in a professional point of view; but it was quite unnecessary to ascertain it in this case for the purposes of the Coroner's Court. The chief object of the coroner's inquisition being to ascertain whether death is from a natural or an unnatural cause, the exact pathological condition of the deceased often becomes a secondary consideration; but in all cases of doubt or difficulty, or where any suspicious circumstances exist or are suspected (as far as can be judged from the report of the coroner's officer), a post-mortem examination of the deceased is invariably ordered by the coroner previous to the inquest.

I am, Sir, faithfully yours,

GEO. DANFORD THOMAS,

June 15th, 1875. Deputy Coroner for Central Middlesex.

FŒTAL DENTITION.

Two instances of children born with teeth were communicated on the 8th inst. to the Académie de Médecine de Paris by M. Mattei; and in one of the cases, in which two middle incisors existed at birth in the lower jaw, the mother, it was said, had also been born with one tooth through. No other members of the family had presented the peculiarity.

Dr. J. A. Timmins.—A case of locomotor ataxy admitted into a general hospital would unquestionably be placed under the care of a physician.

M. L. N.—We hope to publish the letter in due time.

HEADACHE FROM INTRACRANIAL DISEASE.

To the Editor of THE LANCET.

SIR,—I see in your last week's impression a communication from Mr. John J. Pickles, of Leeds, who states that he has never seen any evil consequences from giving subcutaneous injections of morphia in the above malady. I perfectly agree with him so far as the relief is concerned; but I fancy he will find (as I have done, and more especially in a case now under my care) that the excessive vomiting following its frequent administration is so severe that the patient will rather leave the head alone than the stomach should be so upset by its use.

I remain, Sir, yours &c.,

Parkstone, June 16th, 1875. M. R. PHILPOTS, L.R.C.P. & S. Ed.

To the Editor of THE LANCET.

SIR,—The able and interesting lecture by Dr. MOXON (THE LANCET, May 29th) upon one form of headache, with the opening of a wide field so little gone over and so obscure, leads me to ask the consideration of practical men upon a typical case, not uncommon, but requiring much delicacy of treatment.

At sunset until sunrise, every summer, an uncomfortable congestive feeling in the head, attended with a whizzing or buzzing in the ears (occasional singing); no headache by day; no fulness of pulse (not connected with meals); unaided and unaffected by ordinary matters, such as food or medicine, though rather worse on mental application. Health in every way good; circulation, digestion, and secretions normal; diet proper; stimulants rarely used; study and exercise not excessive; age past middle life; no organ diseased; sleep fair, though accompanied by light dreams and singing in the ears; no special hereditary malady. How are these sounds to be explained? What means to be employed, seeing that no other indications for medicines present themselves, and that the mode of life is, on the whole, normal?

Yours &c.,

June, 1875. J. F. ELWIN, F.R.C.S.

THE VALUE OF A FOOT.

THE Law Court of Lyons has given a verdict in favour of the plaintiff in the following case:—A gentleman, seventy-seven years of age, had his leg amputated. Three surgeons took part in the operation, which was followed by excellent results. What became of the amputated leg? The gardener had been desired to bury it; but one of the surgeons had removed the foot to dissect it at home. Several months afterwards the honorarium was requested; but the patient began to complain about the removal of the foot, and sent to his surgeon about £8 less than the sum demanded (about £28). Hence the suit. The operator contended that he had not taken away the foot, that it had been carried off by one of his assistants, and that he was not responsible for the act. Indeed, to get rid of the mean quibbling of the patient, the assistant consented to diminish his own claim by £4. But the Court gave a verdict for the full amount, the reason being principally the shabby conduct of the old man, who was endeavouring to speculate upon the disappearance of his foot. We recollect the case of a surgeon in London, who was anxious for a post-mortem examination of a patient who had died under his care. The friends offered to give their consent if he would forego his honorarium. This he very justly refused, and gave up the autopsy. As regards the foot, it may become a question whether we have a right to take possession of any part of the human body. The safest plan is to mention the matter to the friends, and get a written permission.

Dr. P. Shepherd.—Will our correspondent have the kindness to furnish the information?

MR. STANSFELD AGAIN.

To the Editor of THE LANCET.

SIR,—As a visitor here I have enjoyed the privilege of hearing the syphilis-preservation agitation discussed in one of Mr. Stansfeld's meetings. A town councillor, and another speaker personally conversant with the working of the Contagious Diseases Acts in this district, each gave remarkable testimony in favour of these measures.

The reverend chairman, in a singularly boisterous prologue, occupied half his speech with rearing the cabalistic Magna Charta of Dr. Kenealy as a prop for his cause. The statistical and would-be-practical arguments of Mr. Stansfeld were offered in a recitation of one of his tracts, handed to me after the meeting as an excerpt of his speech "at Liverpool on the 25th of January, 1875." He approached the religious argument with more quiet fervour than previous reverend speakers, and feared the anger of Heaven for himself and for his country if "the doctors" were suffered to ameliorate the condition of society in respect of syphilis.

The town councillor pointed out that Government did not fear to interfere with Providence so far as to enact laws, and employ a large staff of officials, for the suppression of other contagious diseases, as small-pox and scarlatina.

The right hon. gentleman declared, with caustic warmth, that the sole object of these Acts was "to provide clean women" for vicious youth. With singular perversity he declared himself in favour of special hospitals to cleanse the "unclean," and would leave Government grants to hospitals in ports and other places where syphilis is chiefly cultivated! As a medical critic, Mr. Stansfeld informed his sympathetic audience that the distinction between gonorrhœa and syphilis as "more serious" and "less serious" was unreal; and referring to remarks of Mr. Simon upon the question of curability of syphilis, he set forth as the opinion of Mr. Simon the sentiment that syphilis is not vastly more "serious" than gonorrhœa. Again, he referred to the expressed opinion of Dr. Parsons, that it would be well to subject all men "*known to frequent brothels*" to the same regulations as registered prostitutes. Then he said, "Dare the Government propose to enact such a law? Do you think the nation would submit to it?" This was a great hit; but the climax of the evening immediately followed: "*I know that you would not submit to it!*" If the virtuous citizens of Portsmouth be not "known to frequent brothels," they would not come within the operation of such Act. But as nine-tenths of the meeting declared that such Act would be a violation of their "inviolable liberty," a very unpleasant impression of their lewdness or crass stupidity must remain. It was amusing to hear the ex-Minister repeat the threat urged by Dr. Kenealy in another place. Mr. Stansfeld said that the offer of a Parsons Act would be followed by immediate "revolution." With less vivacity than formerly, he repeated his old objection, that the Contagious Diseases Acts were smuggled through Parliament. Does the right hon. gentleman still retain the idea that a member of the Government, who is attending to his business, *can* be "surprised and deceived" by his colleagues in respect of any Bill whatsoever?

As I have some faith in the survival of the fittest, I cannot think that Mr. Stansfeld and his roaring chairman will be able to extinguish "the doctors," whom he says he regards as the less competent to form a sound opinion, because they have made the matter an object of their special study!

I am, Sir, your obedient servant,

Southsea, June 15th, 1875. THOMAS BUCKLE.

Mr. J. W. Raines.—We never recommend a particular physician or surgeon. Our correspondent cannot do better than place himself in the hands of a medical practitioner in his own neighbourhood.

Dr. John Aikman is thanked.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—I wish to state, for the information of those who might otherwise be misled by Mr. Hardy's reply to the deputation from the Royal College of Surgeons, Ireland, on the subject of forage allowance to army medical officers (as reported in your issue of the 5th June), that for fifteen years this allowance to officers of field rank was one of the inducements held out to surgeons to join and remain in the service, and that at the time of publishing the Royal Warrant of 1858 no question as to the possibility of carrying out its provisions was raised. On the contrary, the guarantee then given was honourably fulfilled, until Mr. Cardwell's Warrant of 1873 was published. No concession whatever was made, either by Mr. Hardy's predecessor or anyone else, for the taking away of this allowance. It is too hard to find that we must submit to an injustice for which a civilian would have a remedy in a court of law. Your obedient servant,

June, 1875. A SUFFERER.

DANGEROUS COMPOUNDS.

THE *Pharmaceutical Journal* of Vienna states that the following prescription was sent to a pharmacist:—Chromic acid, eight grains; glycerine, one drachm. External use. The dispenser dissolved the acid with a little water in a phial by a little shaking; the glycerine was then poured in, and the phial again shaken. Thereupon the compound exploded with a very loud report, and was carried with great force to the ceiling of the shop. The phial, which did not break, became coated with a black pigment, and remained in the hand of the frightened dispenser. The case deserves attention from the fact that the ingredients were in such small quantities and the explosion so powerful.

Mr. Berkeley Hill.—Very soon.

Calculs.—We can only advise our correspondent to consult his medical attendant.

Mr. F. T. Coates is thanked for his note.

NIGHT-SOIL CARTS.

To the Editor of THE LANCET.

SIR,—I am much astonished that something is not done by local sanitary authorities to abate the nuisance of night-soil carts. In Leeds, for instance, when the middens in a certain district are to be emptied, a long procession of carts, with heavy broad wheels, without springs, proceed to the neighbourhood, each cart in its progress over the pavement making noise sufficient to wake the soundest sleeper. The lively procession commences about half-past ten at night, and for about two hours the carts roll past with horrid noise and dreadful rumbling, making sleep impossible. At about one in the morning there is a lull for an hour, and perhaps sleep is procured. Then in the distance is heard the heavy rolling of the first returning heavy-laden cart (worse than ever on account of its weight), and for two or three hours or longer no more sleep can be procured. But, in addition to this, the drivers swear and shout to one another, they sing and laugh, till night is made most hideous. This nuisance will go on for perhaps three or four nights till all the middens in a certain district are emptied, and then the infernal pest is taken elsewhere to be renewed to the disturbance of the inhabitants. Now for a person in health to be so disturbed for three or four nights is not good. But what must it be to a sufferer from disease, or to one just beginning to get sleep after a long illness, or under the influence of a narcotic? Why, I have myself seen cases of patients just recovering from severe illnesses, and who were beginning to sleep, thrown back by these midnight noises. It is time that the attention of the Local Government Board was called to this state of things. It is surely possible to have carts constructed that little noise may be made? Tires covered with indiarubber and springs to the carts would be better than the present system; and, again, the men employed should be instructed to carry on their business without shouting, &c. I, on my part, shall be glad to see measures taken to abate this great and injurious nuisance.

I am, Sir, yours faithfully,

Leeds, June 11th, 1875. H. A. ALLBUTT, L.R.C.P. Edin., &c.

POOR-LAW MEDICAL RELIEF IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—Would you kindly permit me, through your columns, to inform medical gentlemen holding office under the several parochial boards in Scotland that I propose to read a paper at the forthcoming meeting of the British Medical Association at Edinburgh in August, on the Anomalies and Deficiencies of the existing system of Medical Relief to the Poor of Scotland, and to make suggestions for an amendment of the same. Although I have in the Annual Reports of the Board of Supervision, and the Reports of the Select Committee on Poor Relief (Scotland), 1870-71, ample materials on which to found a case, yet I should be obliged if Poor-law medical officers in Scotland would furnish me with any facts showing the hardships inflicted on the sick poor or on themselves by the present system. As a matter of course, all such communications would be treated as strictly confidential.

I am, Sir, yours obediently,

JOSEPH ROGERS, M.D.,
Formerly President of the Poor-law Medical Officers' Association, England.

33, Dean-street, Soho, London, June 14th, 1875.

CROUP AND DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—Will you permit me to supplement the brief remarks I recently addressed to you on these important diseases by calling the attention of your readers to the clinical observations of Professor Henoch, of Berlin (see *Wochenschrift*, April 30th), addressed by him to the Medical Society of that city. Berlin, it is well known, is rarely free from diphtheria, and therefore affords an extensive area of observation. After some preliminary observations, he remarks that "the diphtheritic process has been anatomically distinguished from croup by the peculiarity that the mucous membrane becomes infiltrated with the secreted matters, while in croup there is a deposition of a free membrane on the surface of the mucous membrane. There is, in fact, a primary fibrinous croup, which has nothing in common with diphtheria as an infectious disease. Towards establishing the proof that a primary croup may exist, and which not uncommonly follows and is the sequence of a catarrh of the larynx—becoming, in fact, plastic croup,—take the following case of measles:—A boy, suffering from measles, was admitted into the Charité, with laryngeal catarrh strongly developed, and yet there was nothing to be seen in the throat beyond simple angina. The hoarseness, however, continued for some days, even after the diminution of fever. After four days' duration the temperature rose, and in a few hours croup was developed, for which tracheotomy was performed. From the aperture in the trachea a long plastic tube of membrane was drawn out. The canula was retained for ten days, and the child recovered. Such cases prove that true croup may be developed from a catarrh; but it must be confessed that at the present time cases of true croup compared with those of infectious diphtheria are of rare occurrence." I remain, Sir, yours &c.,

Blackheath, June 14th, 1875. WILLIAM CARR, M.D.

Mr. John Gorham.—The author of the card sent us is destitute of common sense, and we do not think that much harm is done by the nonsense that he is constantly circulating.

WEEKLY RETURNS.

To the Editor of THE LANCET.

SIR,—In my district cases of scarlet fever and diphtheria are increasing, and a fatal case of small-pox has occurred. The vestry, with the concurrence of the medical officer of health, still decline to avail themselves of the weekly or daily returns of the registrars. In a wealthy parish, are the registrars to be patriotic enough to volunteer their services, whilst all other officers are paid extra sums for any little additional service performed? or are the parishes determined to wait till the effects of an epidemic produce a public scandal?

Your obedient servant,
A REGISTRAR.

June 14th, 1875.

DAVENPORT FUND.

MR. JAMES F. WEST, F.R.C.S., begs to acknowledge the receipt of one guinea from "B." to this Fund. Mr. West begs to inform the subscribers to this Fund that the sum collected amounts to £950, and that the list will remain open till the end of the present month, when it is hoped the Fund will have reached £1000, and it will then be invested for the benefit of Mrs. Davenport and her family in the names of the three following trustees:—Mr. Millington, Head Master of the Bromsgrove Grammar School; Mr. Prosser, Surgeon; and Mr. R. Saunders, Solicitor, of Bromsgrove.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Acland; The Duke of Sutherland; Dr. R. Barnes, London; Mr. Berkeley Hill, London; Mr. Hutchinson, London; Dr. Wilks, London; Dr. B. Hicks, London; Dr. Theodore Williams, London; Prof. Gamgee, Birmingham; Dr. Dreschfeld, Manchester; Dr. Fox, London; Mr. G. D. Thomas, London; Mr. Godlee, London; Dr. Bakewell, New Zealand; Mr. Braden, Lewes; Dr. Macfie Campbell, Liverpool; Mr. R. W. Cecley, Twickenham; Mr. Adey; Mr. Mercer; Mr. Noakes, Hungerford; Mr. MacDonald; Dr. Arnison, Newcastle-on-Tyne; Mr. M'Lellan, Liverpool; Mr. Elwin, Bristol; Dr. Shepherd, London; Mrs. Baines, London; Mr. R. D. Smith, London; Mr. Snell, Sheffield; Dr. Carr, Blackheath; Mr. Harris, Birmingham; Mr. Ackman, Guernsey; Dr. Sawyer, Birmingham; Mr. Long, Hackney; Dr. Gowan, Powick; Mr. Barling, Newnham; Mr. Ingpen, London; Mr. Raines, Acaster; Mr. Hulke, London; Mr. Littlejohn, Dundee; Dr. Cotton, Edinburgh; Dr. Wilkinson, Sydenham; Mr. Morris, Barnsley; Mr. Pearse, Wisbeach; Mr. Palin, Wrexham; Mr. Radford, Ben Rhydding; Mr. Boase, Dundee; Mr. Rogers, Calne; Dr. Gramshaw, Walton-on-the-Naze; Dr. Hoggan, London; Dr. Timmins, Carmarthen; Mr. Venman, London; Mr. Bevers, Oxford; Mr. Holmes, Cosham; Mr. Morris, Swansea; Messrs. Kirtley and Co., Sunderland; Mr. Chiene, Edinburgh; Mr. Howard, Colchester; Mr. D. Barns, London; Dr. Currie, Edinburgh; Dr. Clifford Allbutt, Leeds; Mr. Ansell, London; Dr. Rogers, London; Mr. M'Ilwaine, Newry; Mr. Davidson, Camberwell; Mr. Wood, Leamington; Messrs. Houghton and Co., Philadelphia; Mr. Thornton, New Cross; Messrs. Fradelle and Marshall, London; Mr. Stent, Guildford; Dr. Sherlock, Powick; Mr. Lyle, Dalston; Mr. Williams, Olney; Mr. Callant, Bridgnorth; Dr. Blythman, Swinton; Mr. Lewis, Bath; Mr. Unsworth, Liverpool; Mr. Hall, London; Mr. Richardson, Omadle; Dr. Waller, Peterborough; Mr. Escell, Idle; E. G.; Alpha; Chirurgeon; A. F. G.; Cœlebs; Civilian; T. S.; Solanum Tuberosum; Inquirer; A. M. D.; Bachelor Bill; M. O. H.; M.D., who keeps an Errand Boy; Professor; A Medical Officer; R. S. V. P.; A Registrar; Student; &c.

LETTERS, *each with enclosure*, are also acknowledged from — Dr. Stutter, Sydenham; Mr. Watson, London; Mr. Edwards, Furneaux Pelham; Dr. Bruce, Southampton; Mr. Framley, Stratford-on-Avon; Mr. Knight, Northampton; Dr. Brailey, Derby; Mr. Walker, Crick; Mr. Morgan, Lichfield; Mr. Day, Cwm Bran; Dr. Hogg, Margate; Mr. Clacy, Ilkley; Mr. Smith, Northampton; Mr. White, Coltishall; Mr. Roberts, Attercliffe; Mr. Ansell, Fenny Stratford; Mr. Smith, Hereford; Mr. Waring, Sudbury; Mr. Terry, Bradford; Mr. Reilly, New Cross; Mr. Stuckey, Cheapside; Mr. Thomas, Brockley; Mr. Croxton, London; Dr. Lacey, Plumstead; Mr. Jones, Aberdare; Mrs. Agassiz, Exmouth; Dr. Tate, Woodbridge; Mr. Revis, Newport Pagnell; Mr. Fairles, Montgomery; Dr. Etheridge, Bromyard; Dr. Mitchell, New Cross; Mr. Milligan, Wirksworth; Mr. Howard, New Buckenham; Mr. Coates, Prestwich; Dr. Mackay, Rothsay; Mr. Rees, Llanelly; Mr. Woodcock, Manchester; Mr. Lewis, Rainhill; Dr. Bell, Preston; Mr. Bakewell, Church Stretton; Dr. M'Colman, Tongue; Mr. Sampson, York; Mr. Jessett, Erith; Mr. Milner, Aldborough; Mr. Coates, Carharracks; Mr. Young, Edinburgh; Mr. Deacon, Kington; Mr. Marsh, Manchester; Mr. Lockwood, Westgate; Mr. White, London; Mr. Robinson, Sheffield; Mr. Hunter, Aberdeen; Mr. Morris, Canning Town; Mr. Hind, Barton-le-Cley; Mr. Beal, Brighton; Dr. Latham, Cambridge; Mr. Keane, Halifax; Mr. Purcell, Knutsford; Mr. Woolhouse, Chantry; Dr. Gill, Folkestone; Dr. Veale, Hampsthwaite; Surgeon, Darlaston; B. A., Oxford; R. E., Swansea; A. B., Wells; Beta, Bridlington; Delta, Bromwich.

Local Government Chronicle, Welshman, Newcastle Daily Chronicle, Western Morning News, Cork Constitution, Isle of Man Times, Liverpool Post, Manchester Guardian, Huddersfield Chronicle, East London Observer, Waltham Abbey Weekly Telegraph, Mansfield Advertiser, Madras Mail, Surrey Advertiser, Liverpool Reader, Birmingham Daily Post, Continental Herald, Sussex Daily News, Dublin Express, and *Bolton Chronicle*, have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, JUNE 17TH, 1875.

Date	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
June 11	29·59	W.	55	51	105	64	50	0·52	Cloudy
„ 12	29·72	S.W.	56	51	92	61	50	0·15	Cloudy
„ 13	29·78	W.	61	54	90	62	48	0·25	Cloudy
„ 14	29·59	W.	60	56	94	64	54	0·15	Cloudy
„ 15	29·48	S.W.	56	52	99	64	52	0·14	Cloudy
„ 16	29·59	W.	57	52	105	66	51	...	Cloudy
„ 17	29·70	W.	57	53	...	...	49	...	Cloudy

Medical Diary for the ensuing Week.

Monday, June 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, June 22.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, June 23.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, June 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, June 25.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M.—Mr. B. T. Lowne, "On the Histology of the Eye." (Second Lecture.)

Saturday, June 26.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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